

AQS 2003



Albuquerque  
AQSWEB User Training

# Session One Monday 8:30 – 11:30

- New System, New Changes
- Data Input Process “The Basics” for Loading Raw Data
- Loading Raw Data Exercise (Clean Data)

# Session Two Monday 1:15 – 4:30

- Data Input Process (Correcting Errors)
- Loading Raw Data with Errors Exercise
- The “Fred” Exercise

# Session Three Tuesday 8:30 – 11:30

- Browsing the AQS Data
- The Standard AQS Reports
- Oracle Discoverer

# Helpful AQS Appendixes

- Appendix A - Tips
- Appendix B – Data Input System Flow
- Appendix C – Discoverer
- Appendix D – Glossary of Terms
- Appendix E - Set up
- Appendix F - Data Transactions
- Appendix G - AQS Directories and Accounts
- Appendix H – Transaction Requirements

# Where to Get More Information

- The AQS HELP DESK  
1-800-334-2405 or 919-541-7862  
Password Resets and Application Errors
- The CDX Help Desk  
888-890-1995  
Password Resets and CDX Support
- The IMG Technical Support  
to Jake Summers ([summers.jake@epa.gov](mailto:summers.jake@epa.gov))  
User registration, Assigning new screening groups, Data questions, Issues, Policies and procedures
- The AIRS AQS TTN website  
([www.epa.gov/ttn/airs](http://www.epa.gov/ttn/airs))

1-  
CDX

email

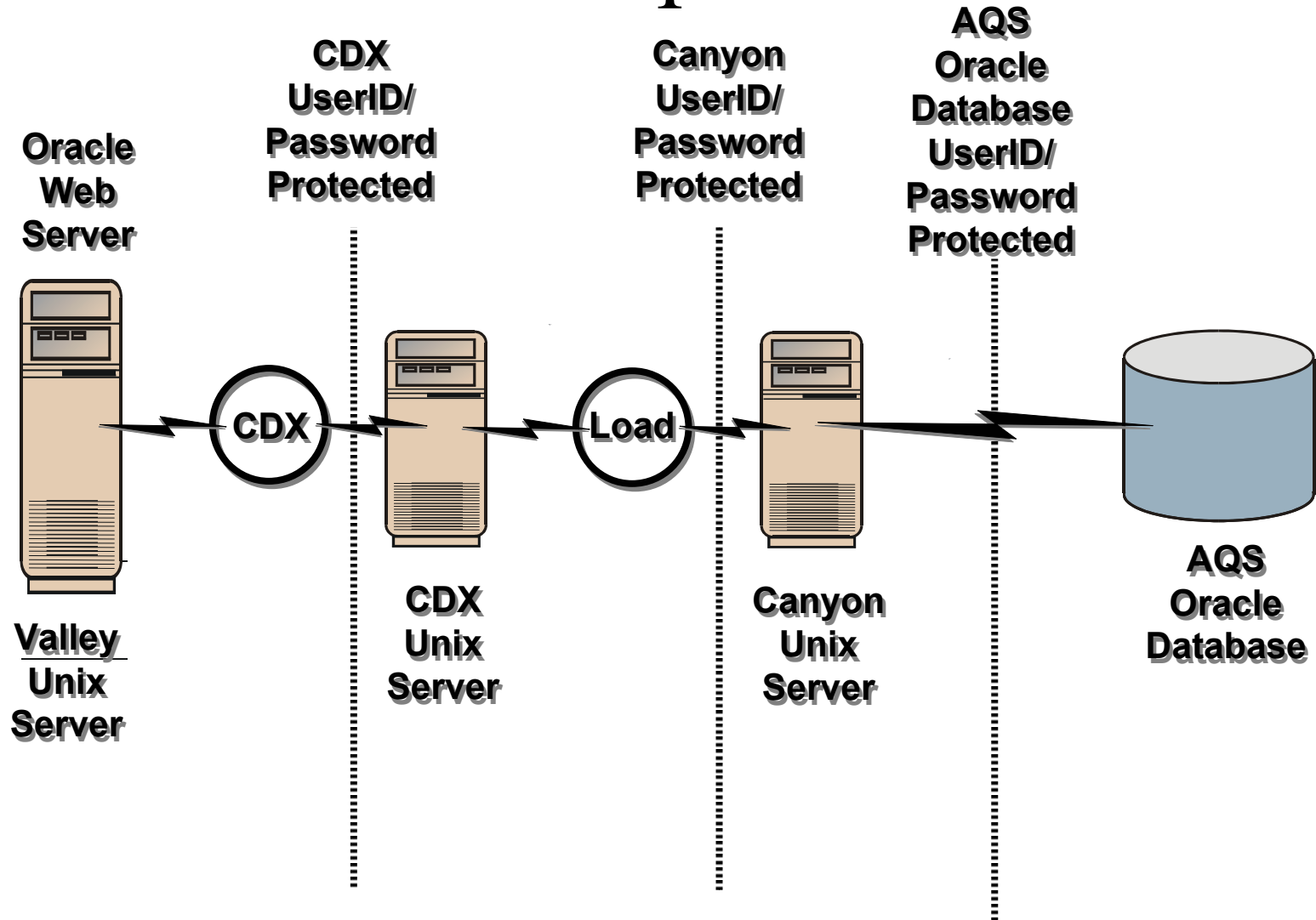
New System, New Changes

# New System, New Changes

- New Architecture – The new AQS system is an Oracle Forms from a Web server-Server Application using an Oracle database
- Installation/Login is Simple
- New Upload/Download process – CDX application replaces the FTP process

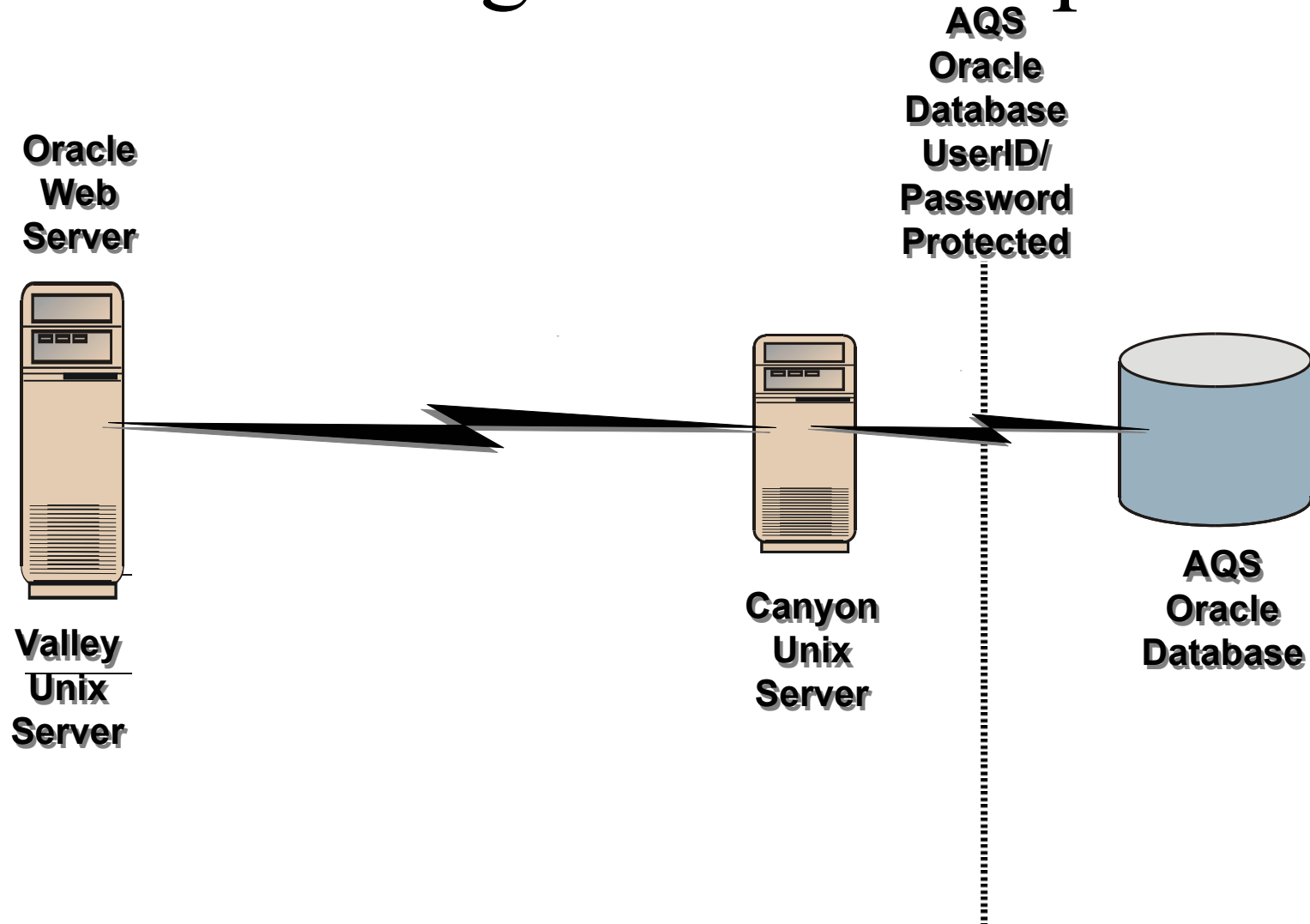
# The AQS Architecture

## Data Input Process



# The AQS Architecture

## Maintaining Data and Reports





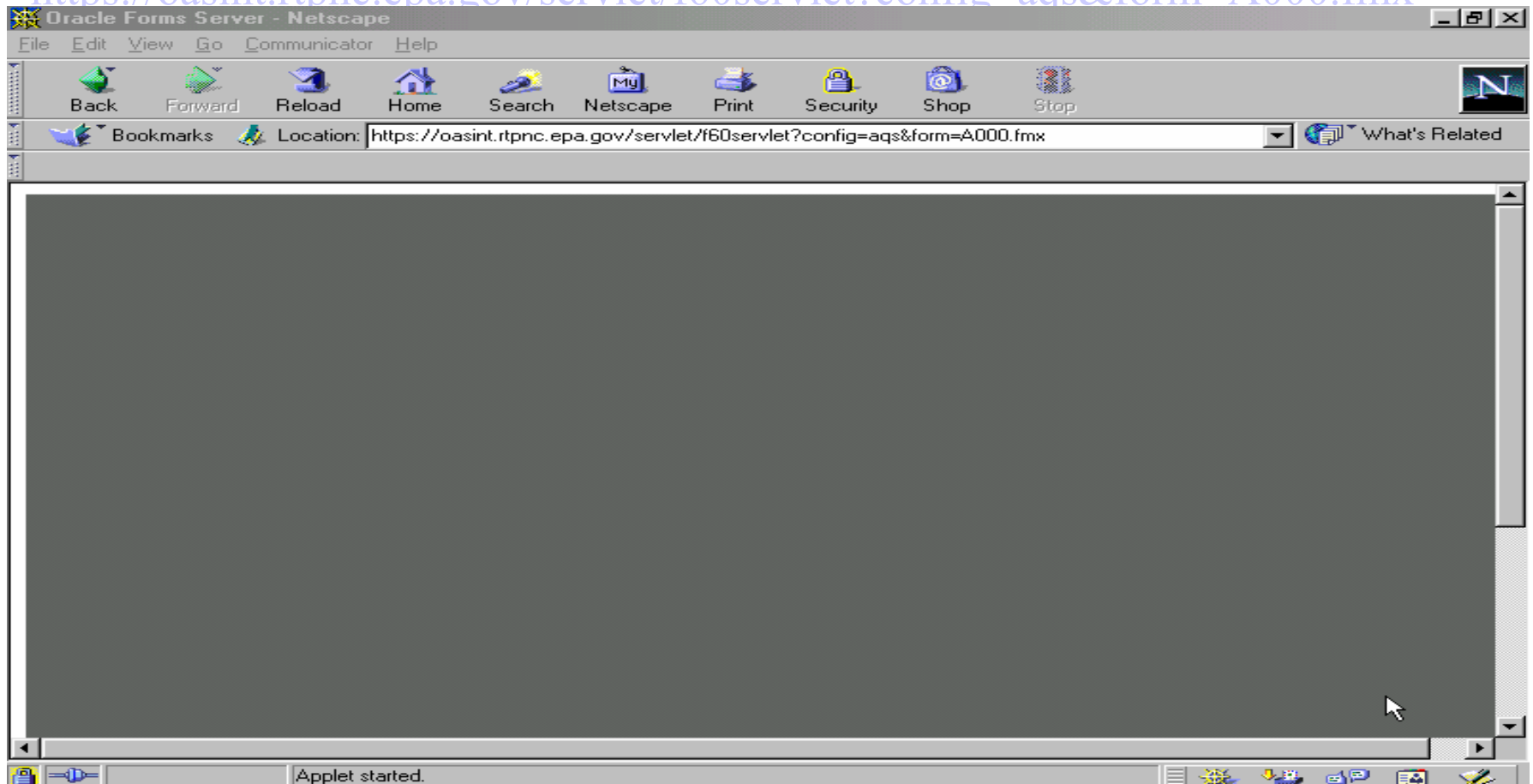
# Installation/Logging on AQS

- No Client Software to install!
- No Oracle software to install|
- No more SecuRemote to access AQS!
- Must use Internet Explorer 6.0
- Use AQSWEB URL to access AQS

# Login Procedures

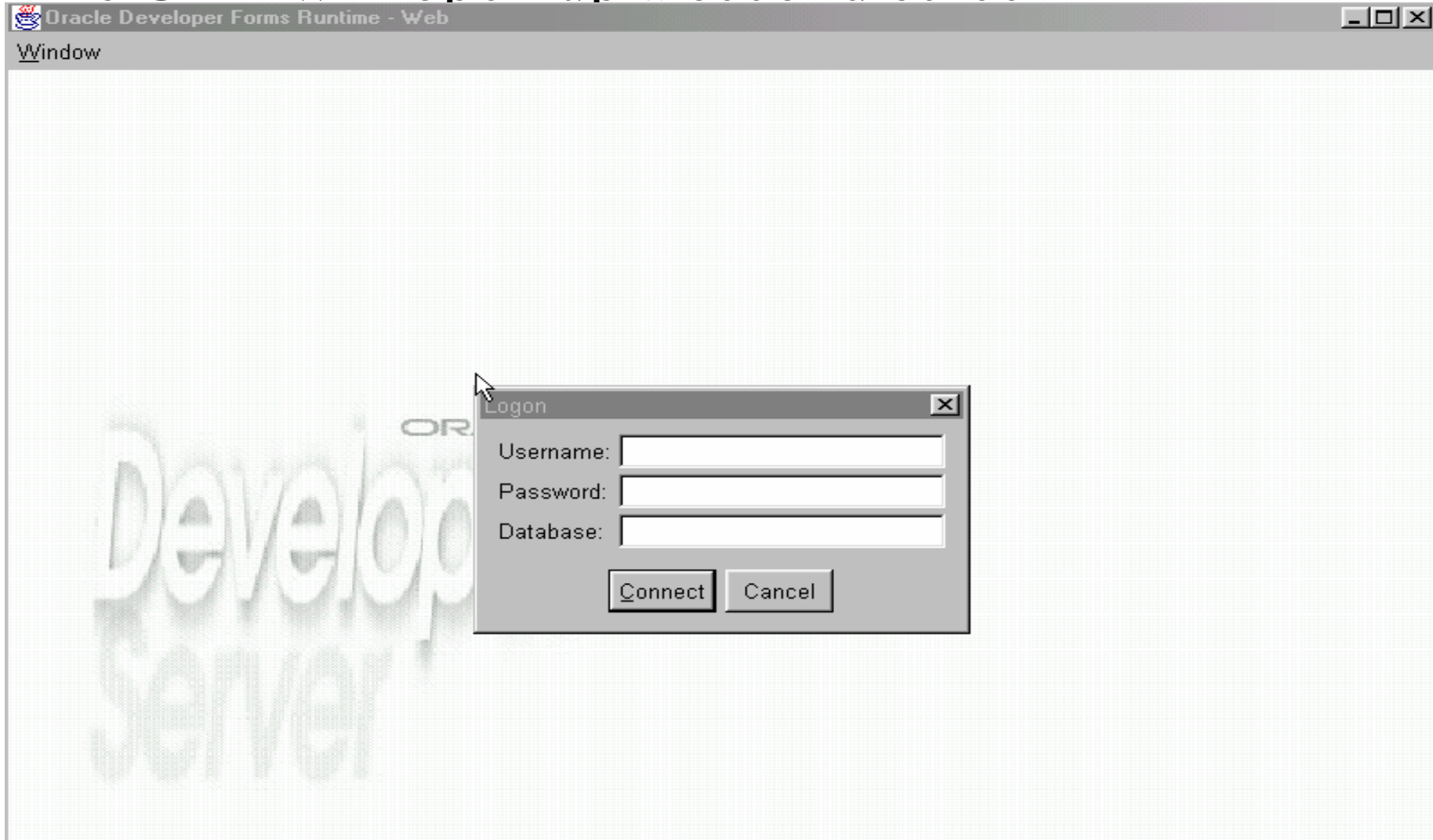
- Open up a Internet Explorer Browser
- The AQSWEB URL is:

<https://oasint.rtpnc.epa.gov/servlet/f60servlet?config=aqs&form=A000.fmx>



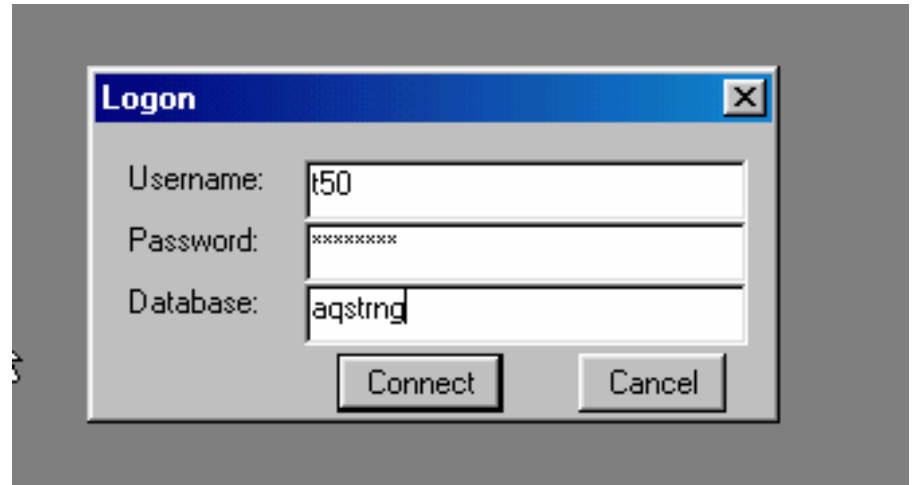
# Login Procedures

- This URL will open up a second screen



# Login Procedures

- Must login to with your Oracle User Id and Password and the AQS Oracle database name. For this class **ONLY**:
  - user id's: **t50** to **t79**
  - password: **aqsis4me2**
  - database: **aqstrng**



- 
- NOTE: Your PRODUCTION userid is a 3 character id and the production database is **AQSPROD**

# Id's and Passwords

- **To get to AQS you need to have:**
  - CDX is used when you Transfer your data to the EPA. The CDX server is used as a holding tank for data before it is sent to the AQS database.
  - Canyon is used to house the AQS Database which is named AQSPROD. It has 10 years of raw data and all summary data. It is also the Unix processor for all batch load and batch reports.
  - Call the Customer Call Center (1-800-334-2405 or 919-541-7862 ) if you have forgotten, misplaced or if you think your password has been compromised.
- **Passwords need to be changed every 90 days!**

# EPA Security and You

- **Passwords will change every 90 days.**
- **Do not write down your password or store it on a computer.**
- **Do not build User IDS and passwords into automated procedures, define them by function keys, not program them into applications.**
- **Do not tell others your passwords.**
- **Report unauthorized attempts to use your password to an EPA security staff member.**
- **More security information? Go to <http://intranet.epa.gov/hqintran/oirm/security/train.htm> and click on Standards of Behavior for Security of Information Resources, Section 3.**
- **Passwords can be changed within the AQS application.**

# New Update Process

- Users control schedule
- On-line update capability
- EPA performs QA data review after load to production.
- Load process performs current level 1 & 2 edits --- Site / monitor relationship, raw data edits
- “Hung” submitted batch sessions can be “cancelled”
- Additional edits for state specific concentration limits (please notify IMG support team with requests for these )
- Critical review - flags high data values

# New Update Process II

- New data elements have been added to Site, Monitor and raw data.
- Data can be loaded in a mixture of old and new transactions.
  - **Note: Old Txn #4 as well as Site/Monitor format is not supported.**
- Daily summaries - PM 24 hr data and all hourly data
  - Number & percentage, max, time of max, mean, ranking, violation
- Quarterly Summaries - as needed for NAAQS pollutants
- Annual summaries - null data count, more percentiles, first 10 max values & time, certification indicator instead of SLAMS summaries.

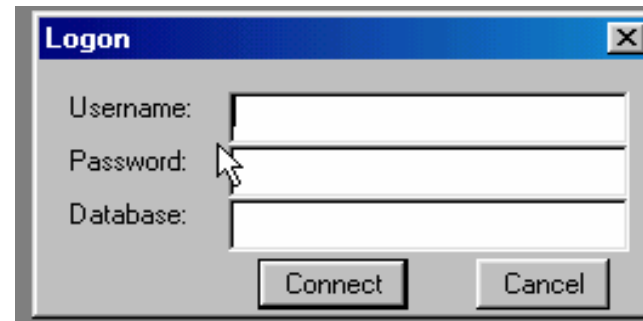


# Screening Groups

- **Can contain one or more people per screening group**
- **Monitors are assigned to the screening group.**
- **All users within the screen group have access to ANY data for the assigned monitor.**
- **Only one “BATCH JOB” can be running at a time for a screening group.**
- **Unless you “exclude” raw data from being posted, if someone in your screening group runs the POST Batch Job, ALL Raw data in the screening group will be posted to the database.**
- **The “Delete by Screening group” option will delete ALL data in the staging tables (data that did not pass level 1 and level 2 edits) for all users in the screen group. Only one person per group has this authority.**
- **Appendix G – AQS Directories and Accounts has information about the screening groups assigned to your state.**
- **If you need additional screening groups contact Jake Summers to request additional screening groups.**

# Instructor Lead Class Exercise 1

- Step 1: Open up a Internet Explorer Browser
- Step 2 : Go to the AQSWEB URL:  
<https://oasint.rtpnc.epa.gov/servlet/f60servlet?config=aqs&form=A000.fmx>
- Step 3. Once the Connect Box appears in the second screen, type in your class username (t%%), password (aqsis4me2) and database – aqstrng, Click on Connect.



The image shows a 'Logon' dialog box with a blue title bar. It contains three text input fields for 'Username:', 'Password:', and 'Database:'. A mouse cursor is positioned over the 'Password:' field. At the bottom right, there are 'Connect' and 'Cancel' buttons.

# Instructor Lead Class Exercise 1

Step 3. Select the screening group access Option and choose your screening group. Click OK. NOTE: The “read only” button gives you read only access.

The image displays two side-by-side screenshots of a software interface.

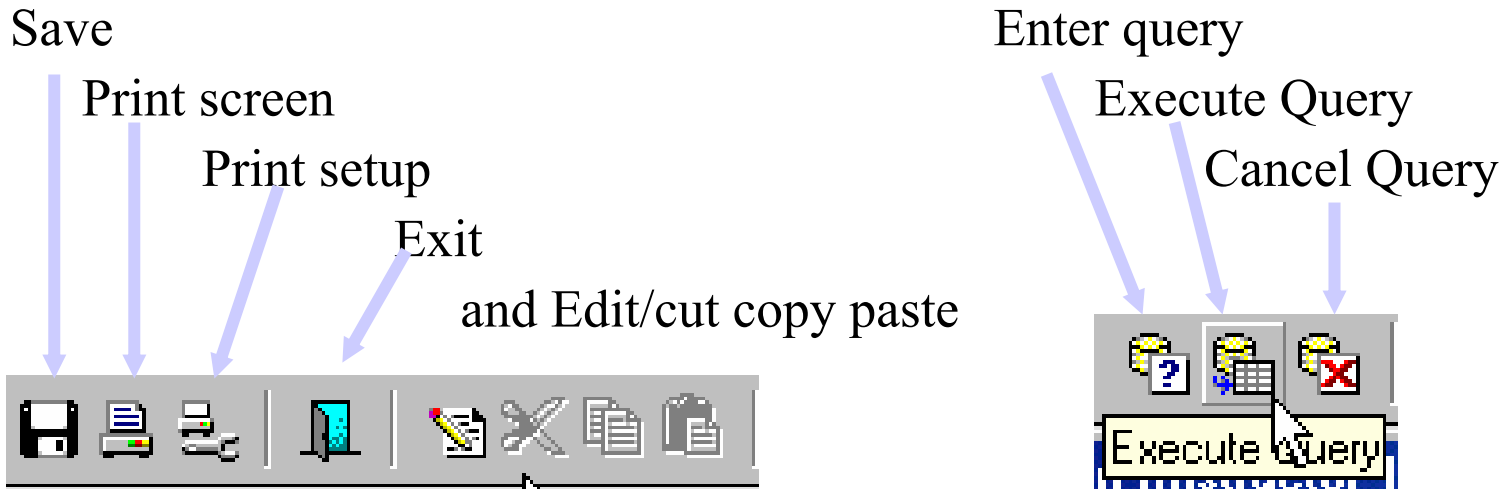
The left screenshot is titled "Select Session Access (Read Only)". It features two radio buttons: "Read Only User" and "Screening Group Access". The "Screening Group Access" option is selected. Below the buttons, a text label reads "This is the AQS training database." with a mouse cursor pointing at it.

The right screenshot is titled "Select a Screening Group (Instructor 1)". It prompts the user to "Select a Screening Group for this session:". Below this prompt is a table with two columns: "Name" and "Type".

Name	Type
INSTRUCTOR 1	STATE

# Instructor Lead Class Exercise 1

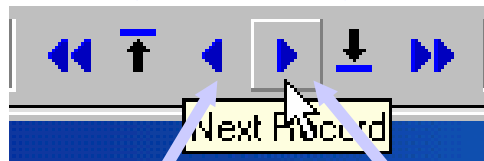
- Step 4. Examine the “tool bar”. Move your pointer to each of the pull down menus on the top of the screen ( items: action thru window )



# Instructor Lead Class Exercise 1



First record      Last Record



Prev Record      Next Record

Insert record      Clear record



Delete Record      Duplicate Record

# Instructor Lead Class Exercise 1

- Step 5. Click on the menu bar item “Admin”, from the drop down bar, choose the “Security” option.

The screenshot shows the AIRS-AQS Administration - Application Security (Instructor1) window. The window has a menu bar with items: Action, Help, Security, Reference, User Statistics, Appl Audits, Export Ca Dump Bucket, and Main Menu. Below the menu bar is a toolbar with various icons. The main content area has tabs: User Profile, Maintain Security, Security Reference Tables, Maintain Roles, and User History. The 'User Profile' tab is selected, showing a form for user profile maintenance. The form contains fields for First Name, Initial, Last, Phone, County Code, Oracle User, Acct Num, Fax, Street Address, Zip Code, User Type, Status Ind, E Mail, Dest File, State Code, Agency Code, AQS Contact, EPA Region Code, and Remote Printer. Two green arrows point to the 'E Mail' and 'Dest File' fields, indicating where to make changes. Below the form are sections for 'Change Your Oracle Passwords' (with AQS and CDX password fields), 'Synchronize Unix Password' (with Server Name and Current Password fields), and a status bar at the bottom with 'Record: 1/1' and '<OSC>'.

Field	Value
First Name	TERESA
Initial	
Last	TAPP
Phone	9195414883
County Code	063
Oracle User	TRF
Acct Num	aqscntr2
Fax	919-541-0028
Street Address	79 Alexander Dr., RT
Zip Code	27712
User Type	A
Status Ind	P
E Mail	tapp.teri@epa.gov
Dest File	/data/aqs/aqscntr/trf
State Code	37
Agency Code	1108
AQS Contact	N
EPA Region Code	
Remote Printer	

**Change Your Oracle Passwords**

**AQS** New Password:  Confirm password:

**CDX** Current CDX Password:

**Synchronize Unix Password**

Server Name:  Current Password:

Enter the user's First Name.

Record: 1/1 ... <OSC>

- Step 6. Change the Email address to your Student email address, [aqs\\_t##@hotmail.com](mailto:aqs_t##@hotmail.com), change the Source file to [c:\aqs\\_train\testdata\sitemt](c:\aqs_train\testdata\sitemt), change the DEST file to [/data/aqs/aqs\\_train/t##](/data/aqs/aqs_train/t##), where ## is your student

# Instructor Lead Class Exercise 1

**AIRS-AQS**

Action Help Security Reference User Statistics Appl Audits Export Ca Dump Bucket Main Menu

Administration - Application Security (Instructor1)

User Profile Maintain Security Security Reference Tables Maintain Roles User History

**First Name** TERESA **Initial** **Last** TAPP  
**Phone** 9195414883 **Street Address** 79 Alexander Dr., RTP  
**County Code** 063 **Zip Code** 27712 **State Code** 37  
**Oracle User** TRF **User Type** A **Agency Code** 1108  
**Acct Num** aqscntr2 **Status Ind** P **AQS Contact** N  
**Fax** 919-541-0028 **E Mail** tapp.teri@epa.gov **EPA Region Code**  
**Dest File** /data/aqs/aqstrain/trf **Remote Printer**

**Change Your Oracle Passwords**

**AQS** New Password: Confirm password: OK  
**CDX** Current CDX Password: Synchronize CDX

**Synchronize Unix Password**

Server Name: Current Password: SYNCHRONIZE

Enter the user's First Name.

Record: 1/1 <OSC>

Note – arrow A Change your logon Oracle password. This should be done every 90 days.

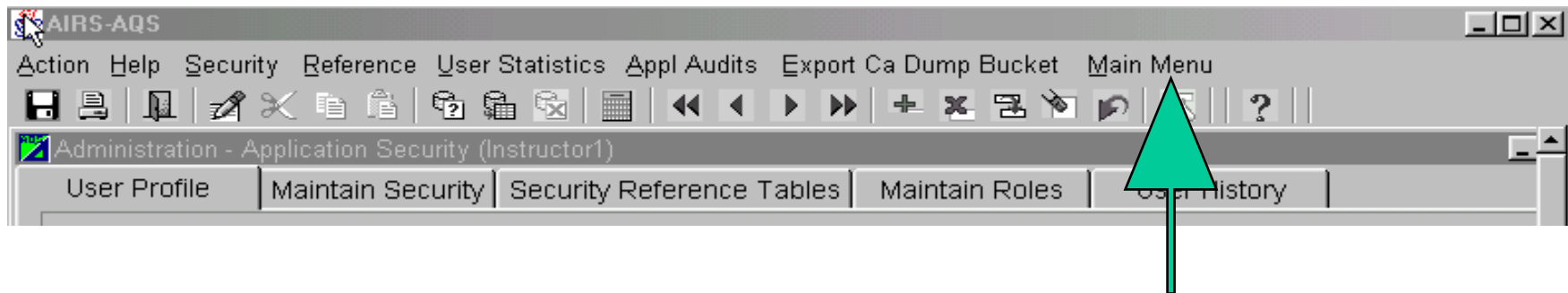
Note – arrow B You can synchronize your CDX password on this screen.

Note – arrow C Unix server passwords must be changed to match the Oracle Password. Enter the original (Unix) Canyon and Volcano passwords. Press “synchronize” to change it to your Oracle password. This MUST be done before initial batch processing! Your Oracle login password is passed to batch load jobs and must match.

Note – When changing “A”, “C” must also be re-done. AQSTRNG is already synchronized.

# Instructor Lead Class Exercise 1

- Step 7. Click on the menu bar “Main Menu”



- Step 8. Close AQS:





# Basic Functions Exercise

- Please turn to Student Exercise 1.
- Use your assigned student username (t##), and password aqsis4me2, database is aqstrng
- Where ## is your assigned student number

# AQS Data Input Process

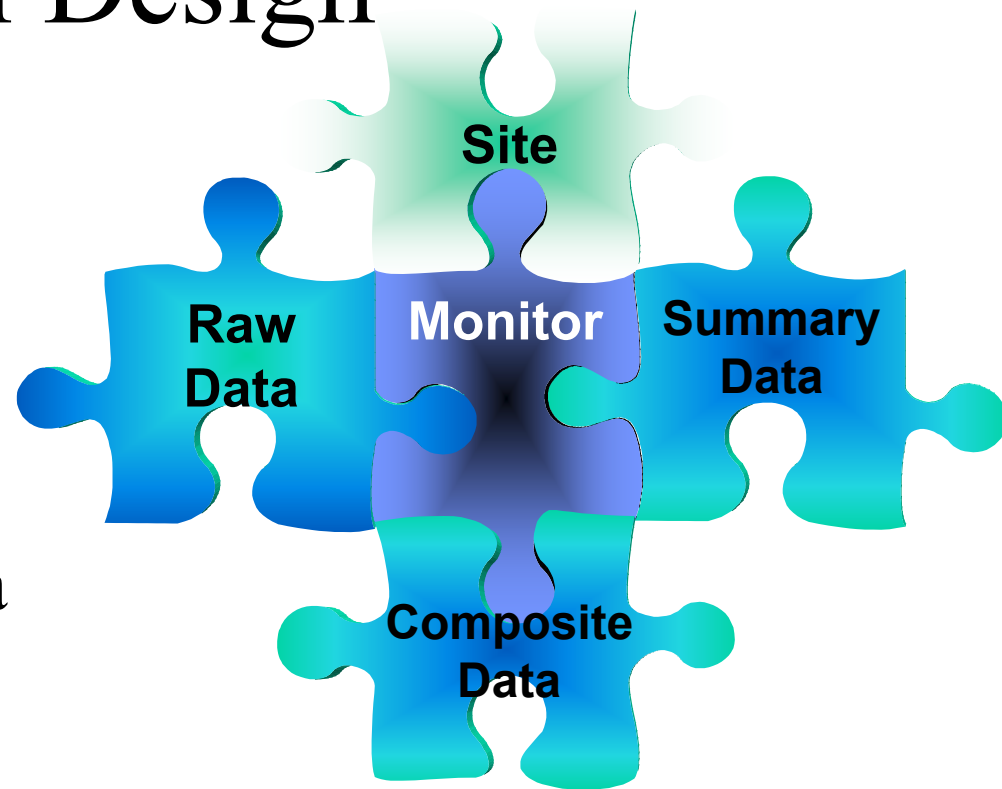
The Batch Load Basics –  
FTP, Load and Post

# Introduction

- “Batch” data refers to a file of transaction records. It can include Site, Monitor, and Raw data transactions as well as Precision and Accuracy Data.
- Raw Data – crucial component of the AQS database
- State/Local/Tribal agencies are responsible for adding and updating AQS data
- You provide the data: EPA provides the software and the database

# Recall Design

- Sites
  - Monitors
    - Raw Data
    - Summary Data
    - Composite Data



# Hourly, Daily, and Sub Hourly Data Record Layout

Field Name	Formatting Rule
Transaction Type <sup>R</sup>	Must exist within Reference Table (RD – Raw Data Type)
Action Code <sup>R</sup>	Must – I, U, or D
State Code <sup>R</sup>	Must exist within Reference Table
County Code <sup>R</sup>	Must exist within Reference Table
Site ID <sup>R</sup>	Must exist within SITE table
Parameter <sup>R</sup>	Must exist within Reference Table
POC <sup>R</sup>	Must exist within MONITOR table
Sample Duration <sup>R(I,U)</sup>	Must exist within Reference Table
Unit <sup>R(I,U)</sup>	Must exist within Reference Table
Method <sup>R(I,U)</sup>	Must exist within Reference Table
Date <sup>R</sup>	YYYYMMDD format
Start Time <sup>R</sup>	hh:mm format
Sample Value <sup>X(I,U)</sup>	Number - 5.5 format
Null Data Code <sup>X(I,U)</sup>	Must exist within Reference Table, if valued
Sampling Frequency	Must exist within Reference Table, if valued
MP_ID	Must exist within Monitor Protocols Table for the Monitor
Qualifier-1	Must exist within Reference Table, if valued
Qualifier-2	Must exist within Reference Table, if valued
Qualifier-3	Must exist within Reference Table, if valued
Qualifier-4	Must exist within Reference Table, if valued
Qualifier-5	Must exist within Reference Table, if valued
Qualifier-6	Must exist within Reference Table, if valued
Qualifier-7	Must exist within Reference Table, if valued
Qualifier-8	Must exist within Reference Table, if valued
Qualifier-9	Must exist within Reference Table, if valued
Qualifier-10	Must exist within Reference Table, if valued
Method Detectable Limit	Number – 5.5 format
Uncertainty	Number – 5.5 format

Two new fields



# Raw Data record layout

Sample records as they appear in the file:

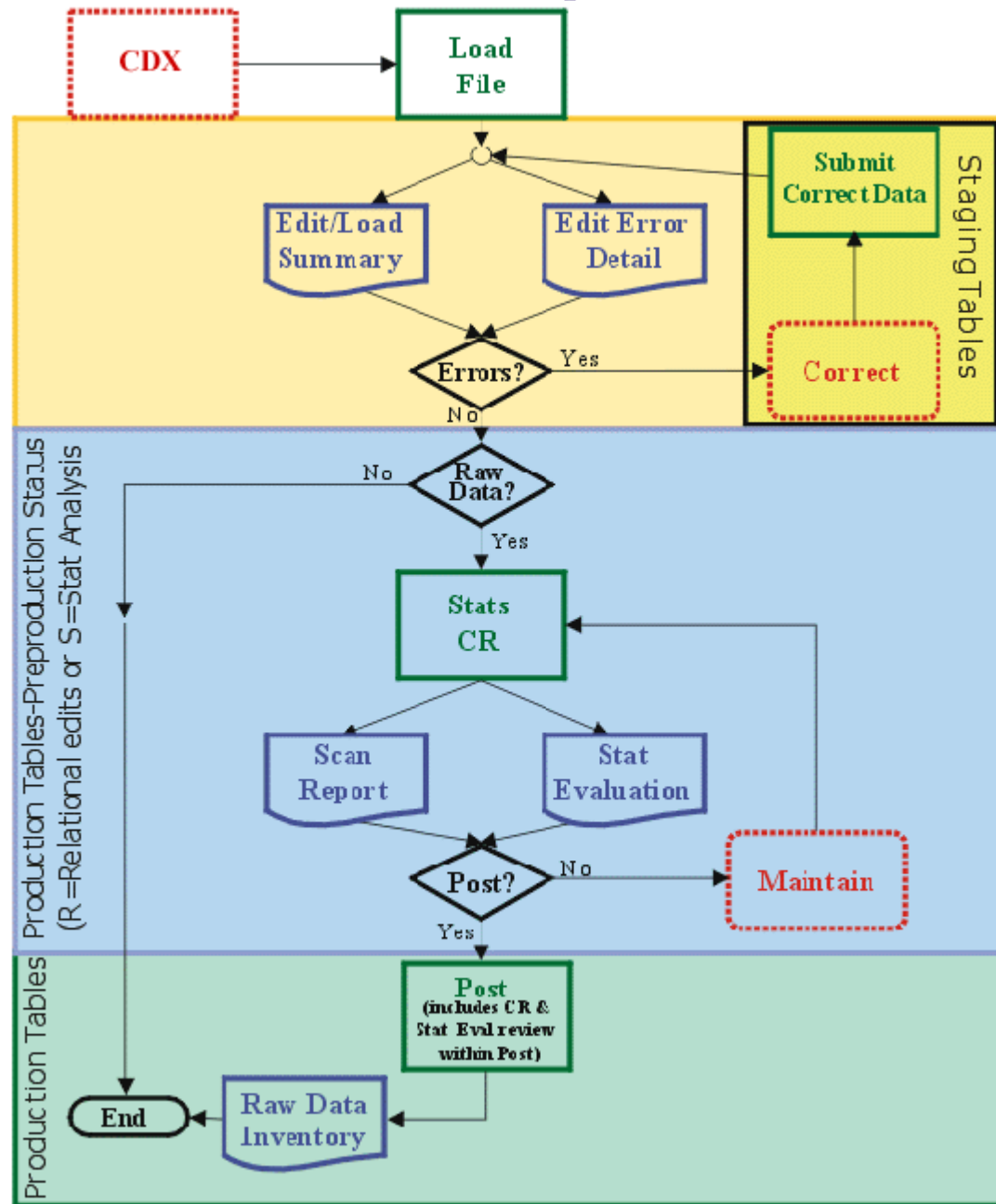
```
RD|I|37|057|5555|81102|1|7|001|062|20010106|00:00|23||6|1|||||||
RD|I|37|057|5555|81102|1|7|001|062|20010107|00:00|10.5||6|1|
```

Transaction Type	Action Code	State Code	County Code	Site ID	Parameter	POC	Sample Duration	Unit	Method	Date YYMMDD	Start Time HH:MM	Sample Value	Null Data Code	Sampling Frequency	MP_ID	Qualifier-1	Qualifier-2	Qualifier-3	Qualifier-4	Qualifier-5	Qualifier-6	Qualifier-7	Qualifier-8	Qualifier-9	Qualifier-10	Method Detectable Limit	Uncertainty
RD	I	37	057	5555	81102	1	7	001	062	20010106	00:00	23		6	1												
RD	I	37	057	5555	81102	1	7	001	062	20010112	00:00	16		6	1												
RD	I	37	057	5555	81102	1	7	001	062	20010118	00:00	11		6	1												
RD	I	37	057	5555	81102	1	7	001	062	20010130	00:00	26		6	1												
RD	I	37	057	5555	81102	1	7	001	062	20010205	00:00	14		6	1												
RD	I	37	057	5555	81102	1	7	001	062	20010211	00:00	30		6	1												
RD	I	37	057	5555	81102	1	7	001	062	20010217	00:00	38		6	1												
RD	I	37	057	5555	81102	1	7	001	062	20010223	00:00	16		6	1												
RD	I	37	057	5555	81102	1	7	001	062	20010301	00:00	9		6	1												
RD	I	37	057	5555	81102	1	7	001	062	20010313	00:00	15		6	1												
RD	I	37	057	5555	81102	1	7	001	062	20010319	00:00	17		6	1												
RD	I	37	057	5555	81102	1	7	001	062	20010325	00:00	23		6	1												
RD	I	37	057	5555	81102	1	7	001	062	20010331	00:00	25		6	1												

**Decimal points no longer needed!!!**

**Trailing pipes are optional**

# AQS Batch Data Input Flowchart



## 5 Steps for Loading Raw Data

Step 1. Transferring raw data to EPA (CDX)

Step 2. Loading raw data into the AQS database

Step 3. Reviewing the results of Load

Step 4. Simulating the results of proposed updates

Step 5. Posting raw data to production status



# Step 1. Transfer Files to CDX

- Raw Data as well as Site and Monitor Data can be recorded as values into “flat” files which must be transferred to EPA.
- CDX is the new procedure to transfer the data files to AQS. Previously, the files were FTPed to a Unix server and then loaded into AQS
- AQS uses the CDX server to temporary store the input data files prior to loading it into the AQS database.
- Please note CDX will only work with Internet Explorer Version 6.0

# Instructor Led Class Exercise 2

## Step 1- File Transfer

- A. Start AQS, using your username, password and database name.
- B. Select your student “screening group access” and Click OK
- C. Choose the Batch menu option



# Instructor Led Class Exercise 2 - Step 1 – CDX File Transfer

## D. Press the CDX button from the Batch Process Screen.

**AIRS-AQS**

Action Help Session Admin Retrieval Maintenance Poc Critical Rev Certification Batch COrrect

Batch Process (Instructor1)

**Batch Load** | Batch Reports

Default Unix Dir: /data/aqs/aqstrain/trf  
Canyon User ID: trf | Priority: HIGH | Run Time: NOW

**Files from CDX ready to Load:**

File Date	File Name	Status

**Session Data:**

Session Date	Oracle User Id	Session Status	Job Type	File Name
20030226 10:13	TRF	ERROR	ST_TABLES	
20021112 18:15	TRF	ERROR	FILE	samplepaac.txt
20021021 12:59	TRF	ERROR	FILE	samplepaac.txt

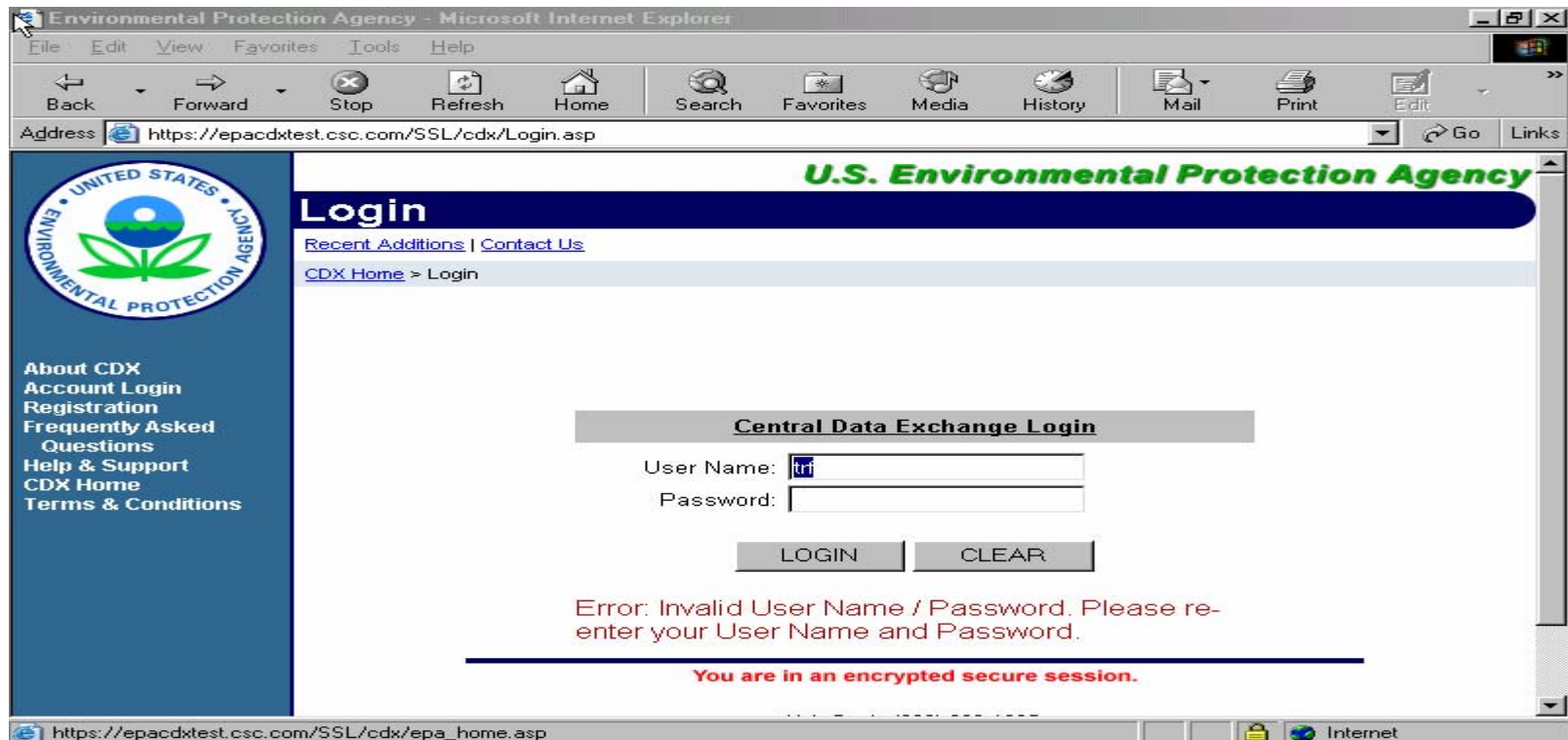
**Buttons:** Refresh CDX, Refresh, Cancel Ses.., CDX, Load File, Submit Correct D..., Stats CR, Post

FRM-40350: Query caused no records to be retrieved.

Record: 1/1 | ... | <OSC>

## Instructor Led Class Exercise 2 - Step 1 – File Transfer, cont'd

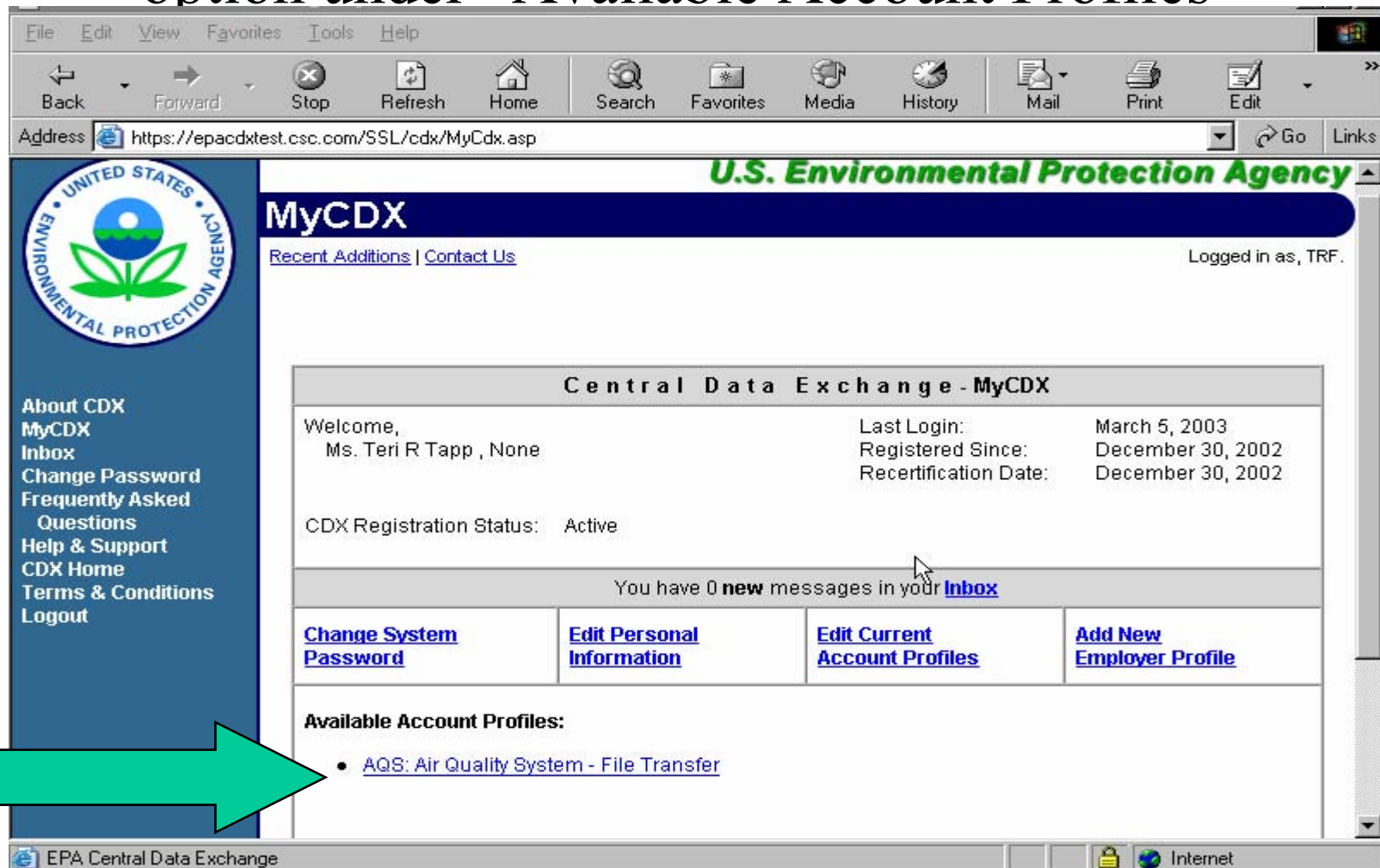
- A. Another Internet Explorer window will open up to the CDX login screen.



- A. Type in your User Name and Password (Note you can synchronize your CDX password on the Admin/Security screen.)

# Instructor Led Class Exercise 2 - Step 1 – File Transfer, cont'd

- A. From the MyCDX screen you can choose the “AQS: Air Quality System – File transfer” option under “Available Account Profiles”



The screenshot shows a web browser window displaying the MyCDX interface. The browser's address bar shows the URL <https://epacdxtest.csc.com/SSL/cdx/MyCdx.asp>. The page header includes the U.S. Environmental Protection Agency logo and the text "U.S. Environmental Protection Agency". The main heading is "MyCDX". Below the heading, there are links for "Recent Additions" and "Contact Us", and a status "Logged in as, TRF.". The main content area is titled "Central Data Exchange - MyCDX". It displays a welcome message to "Ms. Teri R Tapp, None", along with login and registration details: "Last Login: March 5, 2003", "Registered Since: December 30, 2002", and "Recertification Date: December 30, 2002". The "CDX Registration Status" is "Active". A message states "You have 0 new messages in your [Inbox](#)". Below this, there are four links: "Change System Password", "Edit Personal Information", "Edit Current Account Profiles", and "Add New Employer Profile". The "Available Account Profiles:" section lists one option: "AQS: Air Quality System - File Transfer". A large green arrow points from the left side of the screen towards this option. The left sidebar contains a menu with links: "About CDX", "MyCDX", "Inbox", "Change Password", "Frequently Asked Questions", "Help & Support", "CDX Home", "Terms & Conditions", and "Logout". The bottom of the browser window shows the "EPA Central Data Exchange" and "Internet" status.

U.S. Environmental Protection Agency

## MyCDX

[Recent Additions](#) | [Contact Us](#) Logged in as, TRF.

### Central Data Exchange - MyCDX

Welcome,  
Ms. Teri R Tapp , None

Last Login: March 5, 2003  
Registered Since: December 30, 2002  
Recertification Date: December 30, 2002

CDX Registration Status: Active

You have 0 new messages in your [Inbox](#)

<a href="#">Change System Password</a>	<a href="#">Edit Personal Information</a>	<a href="#">Edit Current Account Profiles</a>	<a href="#">Add New Employer Profile</a>
--	---	---	--

**Available Account Profiles:**

- [AQS: Air Quality System - File Transfer](#)

EPA Central Data Exchange Internet

# Instructor Led Class Exercise 2 - Step 1 – File Transfer, cont'd

- A. On this screen you will be able to select the files from your Desktop PC to transfer to the CDX server. Click the “SELECT” Button.

The screenshot shows a web browser window titled "Air Quality Subsystem Submittal Form - Microsoft Internet Explorer". The address bar displays "https://epacdxtest.csc.com/SSL/AQS/AQSHOME.ASP". The page header includes the EPA logo and the text "AIR QUALITY SUBSYSTEM SUBMITTAL FORM" with links for "Help" and "Exit Webform".

The main content area is titled "AQS WEB SUBMITTAL FORM" and contains the following text:

This form is for uploading file submissions to AQS.  
Files submitted may be up to 100 Mb in size.

Below the text is a table with two columns: "Files" and "Size". The table is currently empty.

To the right of the table are three buttons: "SELECT", "REMOVE", and "CLEAR".

At the bottom of the form, there is a paragraph of text:

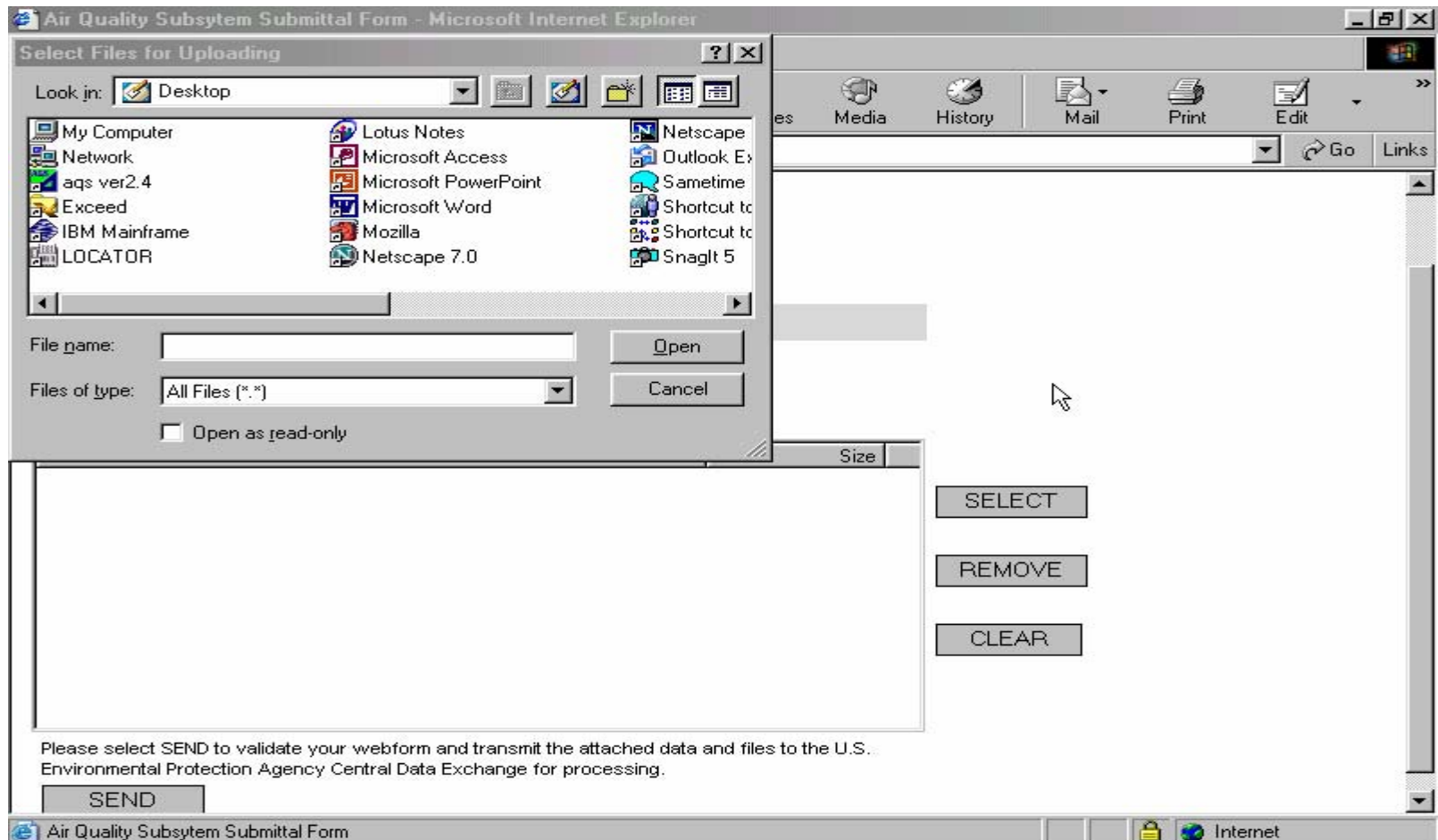
Please select SEND to validate your webform and transmit the attached data and files to the U.S. Environmental Protection Agency Central Data Exchange for processing.

Below this text is a button labeled "SEND".

The browser's status bar at the bottom shows "Air Quality Subsystem Submittal Form" and "Internet".

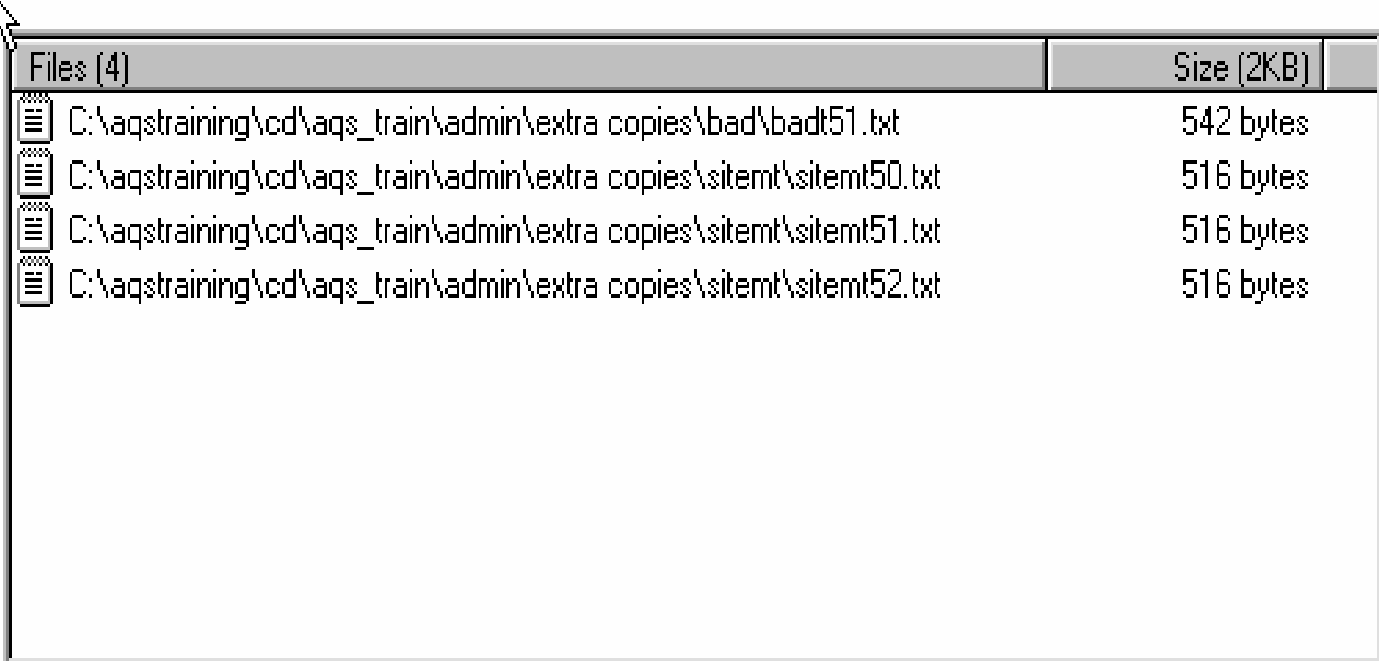
# Instructor Led Class Exercise 2 - Step 1 – File Transfer, cont'd

- A. From the Windows Explorer box, select the AQS file or files you want to load..



## Instructor Led Class Exercise 2 - Step 1 – File Transfer, cont'd

- A. If the files are correct, click the “SEND” button.



The screenshot shows a web interface for file upload. At the top, there is a table with two columns: 'Files (4)' and 'Size (2KB)'. Below the table, there are four rows of files, each with a small icon to the left of the file path. To the right of the table, there are three buttons: 'SELECT', 'REMOVE', and 'CLEAR'. Below the table, there is a text instruction: 'Please select SEND to validate your webform and transmit the attached data and files to the U.S. Environmental Protection Agency Central Data Exchange for processing.' At the bottom left, there is a 'SEND' button.

Files (4)	Size (2KB)
C:\aqstraining\cd\aqstraining\admin\extra copies\bad\badt51.txt	542 bytes
C:\aqstraining\cd\aqstraining\admin\extra copies\site\site50.txt	516 bytes
C:\aqstraining\cd\aqstraining\admin\extra copies\site\site51.txt	516 bytes
C:\aqstraining\cd\aqstraining\admin\extra copies\site\site52.txt	516 bytes

SELECT

REMOVE

CLEAR

Please select SEND to validate your webform and transmit the attached data and files to the U.S. Environmental Protection Agency Central Data Exchange for processing.

SEND

- A. You can Remove, Clear or Select other files to upload.



# Instructor Led Class Exercise 2 - Step 1 – File Transfer, cont'd

## A. A window with the files sent/submitted.

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### U.S. ENVIRONMENTAL PROTECTION AGENCY

AIR QUALITY SUBSYSTEM SUBMITTAL FORM

[Help](#) | [Exit Webform](#)

The following file(s) has been submitted. You will receive a message when the files have been successful processed.	
BADT51.TXT	4 file(s) uploaded.
SITEMT50.TXT	542(bytes)
SITEMT51.TXT	516(bytes)
SITEMT52.TXT	516(bytes)

[Upload more files](#)

You can upload more files or Click on “Exit WebForm” or shut down the CDX window.

An Email will be sent to notify you that the files were sent.

# Instructor Led Class Exercise 2 - Step 1 – File Transfer, cont'd

## Files from CDX are ready to load

**AIRS-AQS**

Action Help Session Admin Retrieval Maintenance Poc Critical Rev Certification Batch COrrect

Batch Process (Instructor1)

Batch Load | Batch Reports

Default Unix Dir: /data/aqs/aqstrain/trf

Canyon User ID: trf Priority: HIGH Run Time: NOW

**Files from CDX ready to Load:**

File Date	File Name	Status
20030305:14:16	bact51.txt	NOTIFY
20030305:14:16	sitemt50.txt	NOTIFY
20030305:14:16	sitemt51.txt	NOTIFY

Refresh CDX

Session Date	Oracle User Id	Session Status	Job Type	File Name
20030305 14:20	TRF	ACTIVE	FILE	bact51.txt
20030226 10:13	TRF	ERROR	ST_TABLES	
20021112 18:15	TRF	ERROR	FILE	samplepac.txt

Refresh Cancel Ses...

CDX Load File Submit Correct D... Stats CR Post

Date of File uploaded through CDX

Record: 1/? ... <OSC>

## Step 2. Loading Data into the AQS database

- “Load File” is a batch job run on UNIX server known as Canyon.
- The user chooses the file to load that were previously uploaded to the CDX server.
- An email is created as a result of the batch Load job.

## Step 2. Loading the Data File

**AIRS-AQS**

Action Help Session Admin Retrieval Maintenance Poc Critical Rev Certification Batch COrrect

Batch Process (Instructor1)

Batch Load | Batch Reports

Default Unix Dir: /data/aqs/aqstrain/trf  
Canyon User ID: trf Priority: HIGH Run Time: NOW

**Files from CDX ready to Load:**

File Date	File Name	Status
20030305:14:16	badt51.txt	NOTIFY
20030305:14:16	sitemt33.txt	NOTIFY
20030305:14:16	sitemt51.txt	NOTIFY

Refresh CDX

Session Date	Oracle User Id	Session Status	Job Type	File Name
20030305 14:20	TRF	ACTIVE	FILE	badt51.txt
20030226 10:13	TRF	ERROR	ST_TABLES	
20021112 18:15	TRF	ERROR	FILE	samplepaac.txt

Refresh Cancel Ses...

CDX Load File Submit Correct D... Stats CR Post

Date of File uploaded through CDX

Record: 1/? <OSC>

The Highlighted File from CDX will be loaded.

## Step 3. Reviewing the results of Data Load

### Possibilities:

- Clean Load
- Loaded with errors
- Didn't even get started!

## Step 3. Reviewing the Results of the Data Batch Load

- **The Session Status Section** - on the Batch Process screen will show “COMPLETED” for a clean load or “ERROR” for a load with errors.
- **The Edit/Load Summary Batch report** – summary results of the Load job
- **The Edit Error Details** - detailed report of errors detected by the Load job. The report identifies the site, monitor, table involved as well as attempts to identify the column in error and to describe the error.
- Email sent to email address in your user profile

# Step 3. Reviewing the Results of Load

- Session Status Section of Batch Load

AIRS-AQS

Action Help Session Admin Retrieval Maintenance Poc Critical Rev CErтификаtion Batch CQrrect

Batch Process (Training78)

Batch Load | Batch Reports

Default Unix Dir /data/aqs/aqstrain/  
Canyon User ID t78 Priority HIGH Run Time NOW

**Files from CDX ready to Load:**

File Date	File Name	Status

Refresh CDX

Session Date	Oracle User id	Session Status	Job Type	File Name
20020211 15:14	T78	COMPLETED	FILE	s78b.txt
20020211 08:39	T78	ERROR	FILE	s78.txt

Cancel Ses...

CDX Load File Submit Correct D... Stats CR Post

FRM-40350: Query caused no records to be retrieved.

Record: 1/1 <OSC>

Clean

# Step 3. Reviewing the Results of Load – Batch Reports

**AIRS-AQS**

Action Help Session Admin Retrieval Maintenance Poc Critical Rev Certification Batch CQrect

Batch Process (Instructor1)

Batch Load Batch Reports

**Batch Reports**

Screening Group Name: INSTRUCTOR1 Refresh

Report Output Format: PDF Delimiter: Tab

Session Date	Oracle User Id	File Name	Job Type
20030310 16:41	TRF		ST_TABLES
20030310 11:47	TRF	donothing.txt	FILE
20030310 11:38	TRF		POST
20030310 11:37	TRF		CRST
20030310 11:34	TRF	sitemt50.txt	FILE
20030310 11:32	TRF	badt51.txt	FILE
20030310 11:30	TRF	do_nothing.txt	FILE
20030310 11:18	TRF	donothing.txt	FILE
20030310 11:00	TRF	sitemt51.txt	FILE
20030310 10:45	TRF	sitemt50.txt	FILE

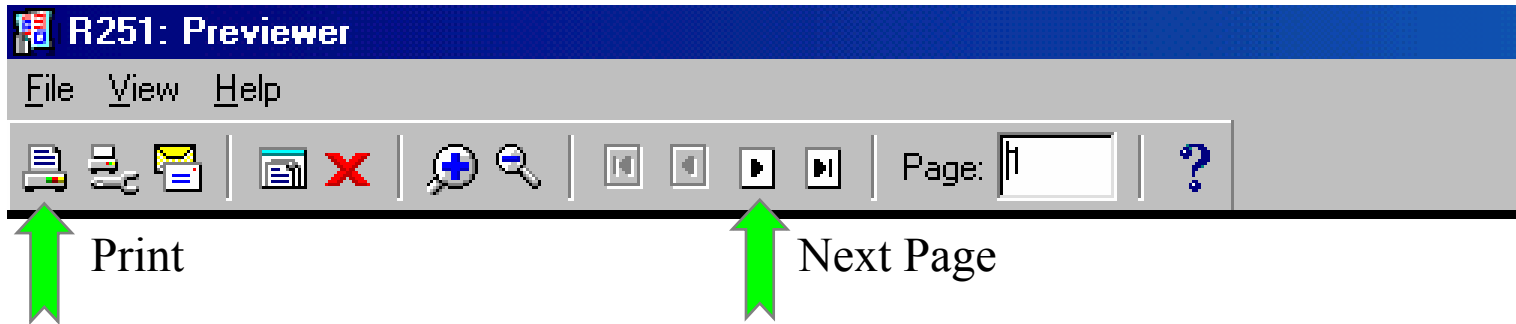
Edit/Load Summary Edit Error Details Scan Report Stat Evaluation Raw Data Inventory

Press button to get the Edit/Load Summary report.

Record: 1/? <OSC>




# The AQS Batch Reports



- In order to run any report you must click on the Next page button, or hit the **Page Down** key on your keyboard.
- After the report has run you may print or save the report.

## Step 3. Reviewing the Results of Load Data Process : Edit/Load Summary Report (clean data)


 **United States Environmental Protection Agency**

**Air Quality Subsystem  
Edit/Load Summary Report**

Jun. 5, 2002

**Screening Group Name :** INSTRUCTOR1

Transaction Type	Transaction Type Description	Errors	Exclusions	Edits	Posts	Total
AA	SITE BASIC	0	0	0	1	1
MA	MONITOR BASIC	0	0	0	1	1
MB	MONITOR SAMPLING PERIODS	0	0	0	1	1
MC	MONITOR TYPE INFORMATION	0	0	0	1	1
MD	MONITOR AGENCY ROLE	0	0	0	3	3
ME	MONITORING OBJECTIVE INFORMATION	0	0	0	1	1
RD	RAW DATA	0	0	48	0	48
<b>Totals</b>		<b>0</b>	<b>0</b>	<b>48</b>	<b>8</b>	<b>56</b>



If zero in Errors column, then the batch passed the basic edits and the Edit Error Details report will be empty.

## Step 4. Simulating results

- **Stats CR** – is a batch job that generates the pre-production raw data information used in the Scan Report and the Statistical Evaluation Report. (Pre-production means the raw data has passed the edits done during the load process and is no longer in the screening stage.)
- **Scan Report** – this report provides information on the maximum values and validity flags for raw data while it is still in pre-production status.
- **Stat Evaluation Report** – this report compares the pre-production data to the existing production data using the Shewhart Test, Patterns test and the Gap test.
- **Email sent to email address in your user profile**  
This is your chance to review the data (and make any appropriate corrections) before it is posted to production status and available for everyone to see.

# Step 4. Stats CR Batch Job for Raw Data

AIRS-AQS

Action Help Session Admin Retrieval Maintenance Poc Critical Rev Certification Batch COrrect

Batch Process (Instructor1)

Batch Load Batch Reports

Default Unix Dir /data/aqs/aqstrain/trf

Canyon User ID trf Priority HIGH Run Time NOW

**Files from CDX ready to Load:**

File Date	File Name	Status
20030305:14:16	badt51.txt	NOTIFY
20030305:14:16	sitemt50.txt	NOTIFY
20030305:14:16	sitemt51.txt	NOTIFY

Refresh CDX

Session Date	Oracle User Id	Session Status	Job Type	File Name
20020821 16:15	TRF	COMPLETED	CRST	
20020821 13:04	TRF	COMPLETED	POST	
20020821 12:58	TRF	COMPLETED	CRST	

Refresh

Cancel Ses...

CDX Load File Submit Correct D... Stats CR Post

The date/time at which a batch or on-line session is initiated.

Record: 26/? <OSC>

## Step 4. Scan Report for Raw Data Load

- Look for Max Values above Historical Max, new 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> max values, validity flags.



### Air Quality Subsystem SCAN Report



Jul. 30, 2001

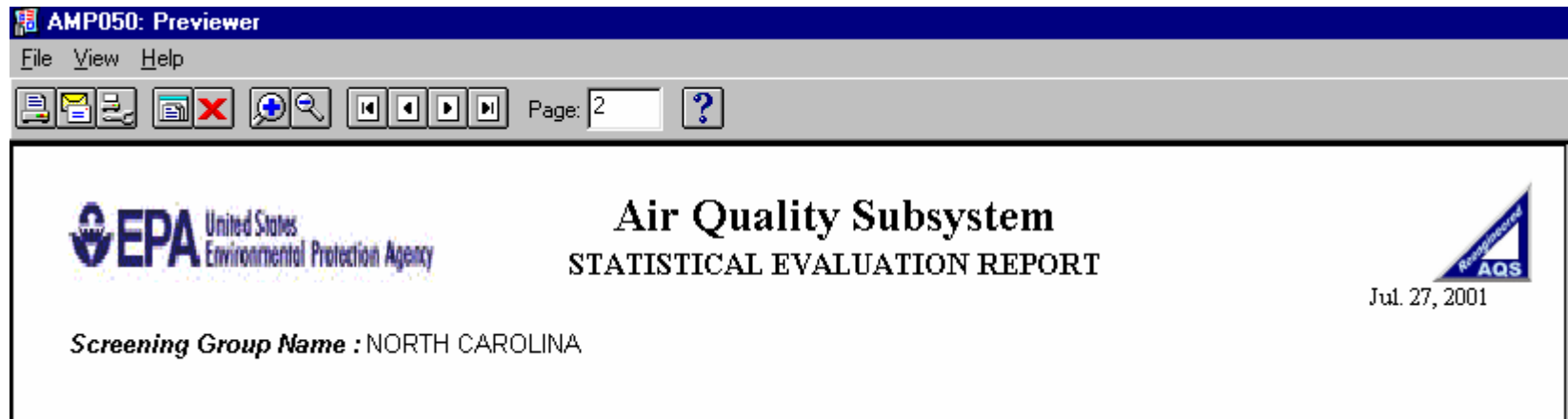
Monitor Id	Unit	Dur	Year Q	Hist Max - Date	1ST Max	Date-Time	Loc VF	2nd Max	Date-Time	Loc VF	3rd Max	Date-Time	Loc VF	4th Max	Date-Time	Loc VF
37-057-5555-81102-3	001	7	2001-1	12 01/12/2000:00	* 38	02/17:00	30	02/11:00	26	01/30:00	25	03/31:00				



- The \* indicates a percentage value higher than the historical max.
- Are these values what you expected?

## Step 4. Statistical Evaluation Report for Raw Data Load

- If any data appears in this report, then data failing the Shewhart Test, Patterns Test, or Gap Test exists in the batch of data.
- Are these values what you expected?



## Step 5. Posting the Raw Data to Production

- Post is the final process in the batch update process
- One last chance to verify that the data is ready for the world
- Raw Data Inventory Report is available after Post batch job runs.
- Email sent to email address in your user profile

# Step 5. Posting the Raw Data to Production

**AIRS-AQS**

Action Help Session Admin Retrieval Maintenance Poc Critical Rev Certification Batch COrrect

Batch Process (Instructor1)

Batch Load Batch Reports

Default Unix Dir /data/aqs/aqstrain/trf

Canyon User ID trf Priority HIGH Run Time NOW

**Files from CDX ready to Load:**

Refresh CDX

File Date	File Name	Status
20030305:14:16	badt51.txt	NOTIFY
20030305:14:16	sitemt50.txt	NOTIFY
20030305:14:16	sitemt51.txt	NOTIFY

Session Date Oracle User Id Session Status Job Type File Name


20020821 16:15	TRF	COMPLETED	CRST	
20020821 13:04	TRF	COMPLETED	POST	
20020821 12:58	TRF	COMPLETED	CRST	

Refresh Cancel Ses...

CDX Load File Submit Correct D... Stats CR Post

The date/time at which a batch or on-line session is initiated.

Record: 26/? <OSC>





## Step 5. Posting the Raw Data to Production Batch Job

- Raw Overview tab shows the monitor(s) with data ready for Posting on a year-quarter basis.
- If “Y” in CR Exists or Stats Exist column, review the data for that tab to be sure it is

Monitor ID	Year - Quarter	CR Exists	Stats Exist	Monitor Locked	Date Locked	
37-057-5555-81102-3	2001-1	Y	N	N		Release Lock
						Release Lock

# Critical Review Raw Data

# Are these values OK?

# Step 5. Posting the Raw Data to Production Batch Job – POST!

**AIRS-AQS**

Action Help Session Admin Retrieval Maintenance Poc Critical Rev Certification Batch CQrect

Review Statistical Data (Instructor1)

Raw Overview Critical Review Raw Data Statistical Errors **Raw Data**

Canyon User ID: TRF Priority: HIGH Run Time: NOW

**Raw Data**

Monitor ID:

Mp ID	Std Samp Value	Unit	Samp Begin Date	Rptd Samp Value	Action Ind	Qualifier Details?

List Qualifier Details

List Qualifier Details

List Qualifier Details

List Qualifier Details

List Qualifier Details

**Monitor Protocols**

Mp Id	Parameter Code	Method Code	Unit	Duration Code	Coll Freq Code	Alt Mdl

2 Return to Batch Process. Post Data to Production 1

Enter the user id for remote processing.

Record: 1/1 <OSC>

# Step 5. Posting the Raw Data to Production Batch Job – Checking the Session Status Section

AIRES-AQS

Action Help Session Admin Retrieval Maintenance Poc Critical Rev Certification Batch Correct

Batch Process (Instructor1)

Batch Load Batch Reports

Default Unix Dir: /data/aqscntr2/testset

Canyon User ID: trf Priority: HIGH Run Time: NOW

**Files from CDX ready to Load:**

File Date	File Name	Status
20030310:11:23	donothing.txt	NOTIFY
20030305:14:16	sitemt51.txt	NOTIFY
20030305:14:16	sitemt52.txt	NOTIFY

Refresh CDX

Session Date	Oracle User Id	Session Status	Job Type	File Name
20030310 11:38	TRF	COMPLETED	POST	
20030310 11:37	TRF	COMPLETED	CRST	
20030310 11:34	TRF	ERROR	FILE	sitemt50.txt

Refresh Cancel Ses...

CDX Load File Submit Correct D... Stats CR Post

Date of File uploaded through CDX

Record: 1/3 <OSC>

# Step 5. Posting the Raw Data to Production - Raw Data Inventory Report

- Can be run after the Post Data batch job finishes
- Provided as a summarized record of posted data - not a required step
- One row for each monitor-year-month of posted data



## Air Quality Subsystem Raw Data Inventory Report



Jul. 30, 2001

**Screening Group:** NORTH CAROLINA

<i>Monitor Id</i>	<i>Duration</i>	<i>Year-Mon</i>	<i>Inserts</i>	<i>Updates</i>	<i>Deletes</i>
37-057-5555-81102-3	24 HOURS	2001-1	4	0	0
37-057-5555-81102-3	24 HOURS	2001-2	4	0	0
37-057-5555-81102-3	24 HOURS	2001-3	5	0	0
<b>Total Inserts:</b> 13			<b>Total Updates:</b> 0		<b>Total Deletes:</b> 0

# Step 5. Posting the Raw Data to Production Batch Job – Raw Data Inventory Report

**AIRS-AQS**

Action Help Session Admin Retrieval Maintenance Poc Critical Rev Certification Batch COrrect

Batch Process (Instructor1)

Batch Load **Batch Reports**

**Batch Reports**

Screening Group Name: INSTRUCTOR1 Refresh

Report Output Format: PDF Delimiter: Tab

Session Date	Oracle User Id	File Name	Job Type
20030310 16:41	TRF		ST_TABLES
20030310 11:47	TRF	donothing.txt	FILE
20030310 11:38	TRF		POST
20030310 11:37	TRF		CRST
20030310 11:34	TRF	sitemt50.txt	FILE
20030310 11:32	TRF	badt51.txt	FILE
20030310 11:30	TRF	do_nothing.txt	FILE
20030310 11:18	TRF	donothing.txt	FILE
20030310 11:00	TRF	sitemt51.txt	FILE
20030310 10:45	TRF	sitemt50.txt	FILE

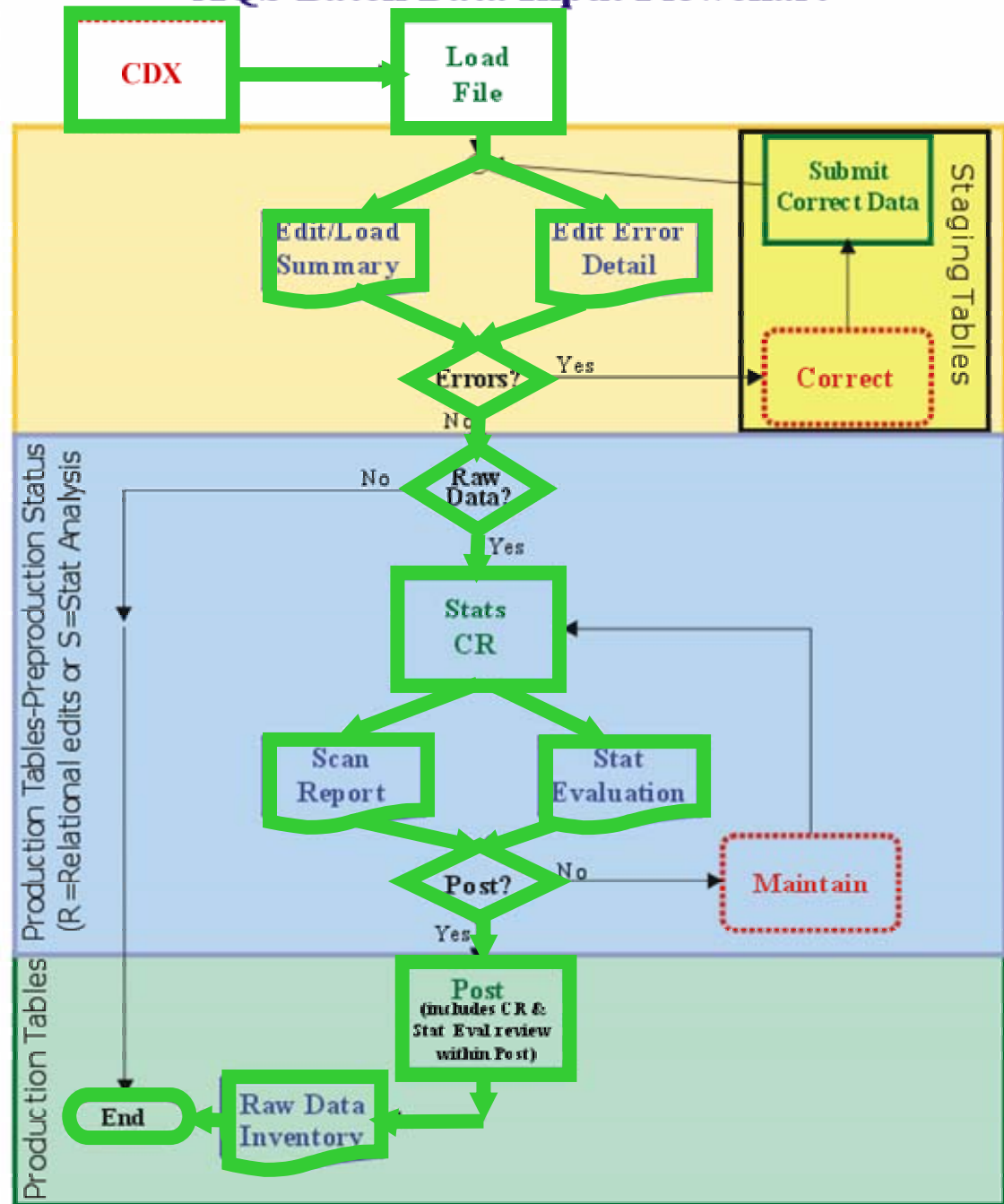
Edit/Load Summary Edit Error Details Scan Report Stat Evaluation **Raw Data Inventory**

Press button to generate the Edit/Load Summary Report.

Record: 1/? <OSC>

# AQS Batch Data Input Flowchart

Path taken with  
“clean” raw data



## Legend



Batch process



Report



Online process

# Batch Loading Data (Clean)

## Exercise

- Please turn to Student Exercise 2
- Use your assigned student username (**t##**), and password **aqsis4me2**, database is **aqstrng**
- Where **##** is your assigned student number
- Use your corresponding **cleant##.txt** file in **c:\aqs\_train\testdata\clean**

(“##” is your assigned student number)



AQS Data Input Process  
What if I have  
problems with the  
Batch Load??

# What can go wrong?

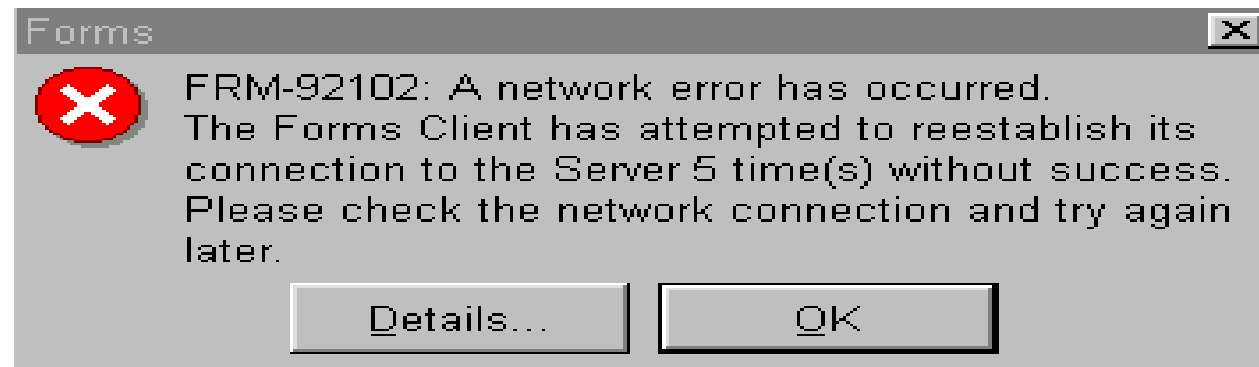
Simple things like:

- Login failure
- Failed on file name
- Screening group of user does not equal screening group of monitor
- Invalid action indicator
- Monitor ID not in database
- Pre-validate failed

# How do I know?

- Look for messages on your screen
- Wait for an email from AQS
- Look at the Edit Error Details Report

# Screen messages



# Screen messages



# Email

## Login failure (on Canyon)

| Input: WARNING NOTICE  
Input: This is a United States Environmental Protection Agency (EPA) Computer  
Input: system, which may be accessed and used for authorized use only.  
Input: Unauthorized access or use of this computer system may subject violators  
Input: to criminal, civil, and/or administrative action. All information on  
Input: this computer system may be monitored, recorded, read, copied,  
Input: and disclosed by and to authorized personnel for official purposes,  
Input: including law enforcement. Access or use of this computer system by  
Input: any person, whether authorized or unauthorized, constitutes consent to these  
terms.  
Input: Compaq Tru64 UNIX V5.1 (Rev. 732) (canyon) (pts/1)  
Input: login:  
Sending Unix ID to host.  
Input: Password:  
Sending Unix Password to host.  
Input:  
Input: Login incorrect  
Input: Wait for login retry ...  
Input: Login incorrect  
Input: login:  
Login Failure! Check user-id and password.  
  
Unable to submit batch reporting job!

# Email

## Monitor Id not in Database

Error on line 1: Monitor ID (State, County, Site, Parameter, POC) not in database

Input Transaction 1: RP|I|01|073|1006|88101|1|1|7|105|116|20010110|008.4|116|008.4|||

Error on line 2: Monitor ID (State, County, Site, Parameter, POC) not in database

Input Transaction 2: RP|I|01|073|1006|88101|1|1|7|105|116|20010122|013.2|116|010.7|||

## Invalid action indicator

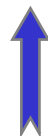
ERROR: AIRS\_BATCH

On Line 1 Invalid Action Indicator

!!

Input Transaction: RD|m|06|045|0009|44201|1|1|008|014|19980425|09|0016.||||||||||

!!



# Edit Error Details Report



## Air Quality Subsystem Edit Error Report

**Screening Group :** INSTRUCTOR 2

**User ID :** TRF

**Session Date :** Oct. 05, 2001 14:24

**Site/Monitor :** 13-021-2222-42101-1

**Table Name :** RAW DATA

**Transaction :** RD || 13 | 021 | 2222 | 42101 | 1 | 1 | 007 | 009 | 20000102 | 00:00 | .005 | |||||

Column In Error	Error Description
UNKNOWN	Invalid Monitor Protocol

**Site/Monitor :** 13-021-2222-42101-1

**Table Name :** RAW DATA

**Transaction :** RD || 13 | 021 | 2222 | 42101 | 1 | 1 | 007 | 009 | 20000102 | 02:00 | 001 | |||||

Column In Error	Error Description
UNKNOWN	Invalid Monitor Protocol



# “Dirty” Data

Problems a little more involved will show up with this data.

Data is for the same monitor as earlier (“clean”) data.

```
RD|I|37|057|5555|81102|1|7|001|062|20010106|00:00|23||6|1|||||||
RD|I|37|057|5555|81102|1|7|001|062|20010106|01:00|23||6|1|||||||
RD|I|37|057|5555|81102|1|7|001|062|20010301|00:00|9||6|1|||||||
RD|I|37|057|5555|81102|1|7|001|062|20010413|00:00|1500||6|1|||||||
RD|I|37|057|5555|81102|1|7|001|062|20010319|00:00|17||6|1|||||||
RD|U|37|057|5555|81102|1|7|001|062|20010401|00:00|25||6|1|||||||
RD|D|37|057|5555|81102|1|7|001|062|20010407|00:00|23||6|1|||||||
```

# Summary Load results for “dirty” data

R251: Previewer

File View Help

Page: 2

**EPA** United States Environmental Protection Agency

**Air Quality Subsystem**  
**Edit/Load Summary Report**

Jul. 30, 2001

Screening Group Name : NORTH CAROLINA

Transaction Type	Transaction Type Description	Errors	Exclusions	Edits	Posts	Total
RD	RAW DATA	6	0	1	0	7
<b>Totals</b>		<b>6</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>7</b>

↑ ↑

6 transactions failed the basic edits: 1 passed

# Detail Load results for “dirty” data



## Air Quality Subsystem Edit Error Report

Jun. 5, 2002

Screening Group : INSTRUCTOR1      User ID : TRF      Session Date : Jun. 05, 2002 16:42

Site/Monitor : 37-057-5555-81102-1

Table Name : RAW DATA

Transaction : RD |D| 37 |057 |5555 |81102 |1 |7 |001 |062 |20010407 |00:00 |||1 |||||

Column In Error	Error Description	Error Code
Relational	Production record doesn't exist to update or delete	-20718

Site/Monitor : 37-057-5555-81102-1

Table Name : RAW DATA

Transaction : RD || 37 |057 |5555 |81102 |1 |7 |001 |062 |20010106 |00:00 |23 ||1 |||||

Column In Error	Error Description	Error Code
Multiple Columns	Sample duration overlaps immediately preceding or succeeding sample value	-20692

Site/Monitor : 37-057-5555-81102-1

Table Name : RAW DATA

Transaction : RD || 37 |057 |5555 |81102 |1 |7 |001 |062 |20010106 |01:00 |23 ||1 |||||

Column In Error	Error Description	Error Code
Multiple Columns	Sample duration overlaps immediately preceding or succeeding sample value	-20692

Site/Monitor : 37-057-5555-81102-1

Table Name : RAW DATA

Transaction : RD || 37 |057 |5555 |81102 |1 |7 |001 |062 |20010301 |00:00 |9 ||1 |||||

Column In Error	Error Description	Error Code
Relational	A pre-production Record already exists for the Monitor - Date-Time	-20574

Site/Monitor : 37-057-5555-81102-1

Table Name : RAW DATA

Transaction : RD || 37 |057 |5555 |81102 |1 |7 |001 |062 |20010319 |00:00 |17 ||1 |||||

Column In Error	Error Description	Error Code
Relational	A pre-production Record already exists for the Monitor - Date-Time	-20574

Site/Monitor : 37-057-5555-81102-1

Table Name : RAW DATA

Transaction : RD |U| 37 |057 |5555 |81102 |1 |7 |001 |062 |20010401 |00:00 |25 ||1 |||||

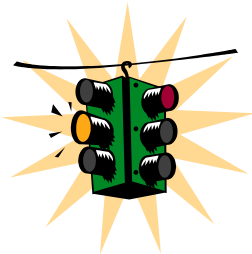
Column In Error	Error Description	Error Code
Relational	Production record doesn't exist to update or delete	-20718

# Using the Correct option

- Correct is used to change data in the staging tables – I.e., data that did not pass the basic edits
- Can edit one transaction at the time or make global changes
- Messages at bottom of screen are the same messages as on the Edit Error Details Report

# Using the Correct option

- New transactions may be entered on Correct
- After making changes/additions on Correct screen, be sure to **SAVE** your changes
- Can use the “Delete by screening group” to completely eliminate all records in the staging tables for your screening group



Be sure this is what you want to do. It works quickly and it deletes **everything** for the screening group, including data entered by other users in your screening group.

# Sample Correct Screen

**Correct - Raw Data (North Carolina)**

State Code	County Code	Site Id	Parameter Code	PQC	Action Ind	Session Date	Duration Code	Reported Unit	Method Code	Coll Date	Coll Time	Rpt Val
37	057	5555	81102	3	I	20010731	7	001	062	20010106	00:00	23
37	057	5555	81102	3	I	20010731	7	001	062	20010106	01:00	23
37	057	5555	81102	3	I	20010731	7	001	062	20010301	00:00	9
37	057	5555	81102	3	I	20010731	7	001	062	20010319	00:00	17
37	057	5555	81102	3	U	20010731	7	001	062	20010401	00:00	25
37	057	5555	81102	3	D	20010731	7	001	062	20010407	00:00	23

Column Name: UNKNOWN    Error Code: -20407    Error Message: Attempted to insert a value for an existing date and time.

Before

4 dup(s)

## Wrong action

State Code	County Code	Site Id	Parameter Code	POC	Action Ind	Session Date	Duration Code	Reported Unit	Method Code	Coll Date	Coll Time	Rpt Val
37	057	5555	81102	3	I	20010731	7	001	062	20010401	00:00	25
37	057	5555	81102	3	I	20010731	7	001	062	20010407	00:00	23

After

# After corrections are made . . .

- Next step is to attempt to Load this data again.
- Use the Submit Corrected Data
- Only data in the staging tables will be loaded
- Check for errors again (from the Edit Error Details Report or from the Correct option)
- If new errors, loop back thru Correct

# Sample: Submit Corrected Data

**AIRS-AQS**

Action Help Session Admin Retrieval Maintenance Poc Critical Rev Certification Batch CCorrect

Batch Process (Instructor1)

Batch Load | Batch Reports

Default Unix Dir: /data/aqs/aqstrain/trf  
Canyon User ID: trf Priority: HIGH Run Time: NOW

**Files from CDX ready to Load:** Refresh CDX

File Date	File Name	Status
20030305:14:16	badt51.txt	NOTIFY
20030305:14:16	sitemt50.txt	NOTIFY
20030305:14:16	sitemt51.txt	NOTIFY

Session Date Oracle User Id Session Status Job Type File Name

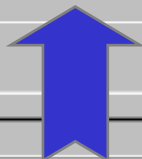
20030305 14:20	TRF	ACTIVE	FILE	badt51.txt
20030226 10:13	TRF	ERROR	ST_TABLES	
20021112 18:15	TRF	ERROR	FILE	samplepaac.txt

Refresh Cancel Ses..

CDX Load File Submit Correct D... Stats CR Post

Date of File uploaded through CDX

Record: 1/? <OSC>





# Once you're satisfied with corrections. . .

- Run the Stats CR batch job
- Review the Scan and Stat Evaluation reports
- Make any additional modifications using the Maintenance option (to data no longer in the staging tables)
- Post the data

# Sample Scan Report



## Air Quality Subsystem SCAN Report



Monitor Id	Unit	Dur	Year Q	Hist Max - Date	1ST Max	Date-Time	Loc VF	2nd Max	Date-Time	Loc VF	3rd Max	Date-Time	Loc VF	4th Max	Date-Time	Loc VF
37-057-5555-81102-3	001	7	2001-2	38 02/17/2001 :00	* 1500	04/13:00	25	04/01:00	23	04/07:00						



The historical max for data currently in production for this monitor is “38” for 2/17/01.

New data will create a new historical max of 1500. This value will also be the 1<sup>st</sup> max for 2<sup>nd</sup> qtr of 2001.

# Sample Statistical Evaluation Report



## Air Quality Subsystem STATISTICAL EVALUATION REPORT



Jul. 30, 2001

**Screening Group Name :** NORTH CAROLINA

Monitor Id	Date:Time	Error	Above Gap Cnt	Slot Below Gap Cnt	Total Gap Cnt
37-057-5555-81102-3	Apr. 01, 2001 :00	Fails Shewhart test.			

Better double check that 1500 value!

# Using Maintenance to modify pre-production records

- Scan and Stat Evaluation reports are designed to help you review your data without having to review each and every sample value.
- Data in pre-production status is only viewable from the Maintenance option
- Pre-production status codes are:
  - R (passed relational edits)
  - S (statistical edits have been run)
- Production status code:
  - P (data is in production)

# Maintenance – other uses

- Modify existing production data
- Add new data

NOTE: Whenever any sample value data is added or modified using the Maintenance option, that data must be run through the Stat CR batch job before it may be posted to production status.

# Sample Maintenance Screen

**Maintain - Raw Data (North Carolina)**

Monitor Raw Data Qualifiers Comments

### Raw Data

Mp ID	Samp Begin Date	Status Ind	Rptd Samp Value	Reported Scale	Std Samp Value	Std Unit	EPA Ind	Freeze Ind	Action Ind	Exclusion Ind	Exclusion Date
1	20010217 00:00	P	38	0	38	001					
1	20010223 00:00	P	16	0	16	001					
1	20010301 00:00	P	9	0	9	001					
1	20010313 00:00	P	15	0	15	001					
1	20010319 00:00	P	17	0	17	001					
1	20010325 00:00	P	23	0	23	001					
1	20010331 00:00	P	25	0	25	001					
1	20010401 00:00	S	25	0	25	001					
1	20010407 00:00	S	23	0	23	001					
1	20010413 00:00	S	15	0	1500	001					

### Monitor Protocols

Mp ID	Parameter Code	Method Code	Unit	Duration Code	Coll Freq Code	Alt Mdl
1	81102	062	001	7	6	

Monitor 37 057 5555 81102 3

# Sample Maintenance Screen – After saving changes

**Maintain - Raw Data (North Carolina)**

Monitor Raw Data Qualifiers Comments

**Raw Data**

Mp ID	Samp Begin Date	Status Ind	Rptd Samp Value	Reported Scale	Std Samp Value	Std Unit	EPA Ind	Freeze Ind	Action Ind	Exclusion Ind	Exclusion Date
1	20010217 00:00	P	38	0	38	001					
1	20010223 00:00	P	16	0	16	001					
1	20010301 00:00	P	9	0	9	001					
1	20010313 00:00	P	15	0	15	001					
1	20010319 00:00	P	17	0	17	001					
1	20010325 00:00	P	23	0	23	001					
1	20010331 00:00	P	25	0	25	001					
1	20010401 00:00	R	25	0	25	001					
1	20010407 00:00	R	23	0	23	001					
1	20010413 00:00	R	15	0	15	001					

**Monitor Protocols**

Mp ID	Parameter Code	Method Code	Unit	Duration Code	Coll Freq Code	Alt Mdl
1	81102	062	001	7	6	

Monitor 37 057 5555 81102 3

Notice that Status Indicator changes back to “R”

# Next . . .

- Status Ind of “R” means data has only passed the basic and relational edits. Statistical edits need to be run again since sample values have changed.
- Rerun Stat CR batch job and review Scan and Stat Eval reports again



## Air Quality Subsystem SCAN Report



Jul. 30, 2001

Monitor Id	Unit	Dur	Year	Q	Hist Max - Date	1st Max	Date-Time	Loc VF	2nd Max	Date-Time	Loc VF	3rd Max	Date-Time	Loc VF	4th Max	Date-Time	Loc VF
37-057-5555-81102-3	001	7	2001	-2	38	02/17/2001	:00	25	04/01:00	23	04/07:00	15	04/13:00				



## Air Quality Subsystem STATISTICAL EVALUATION REPORT



Jul. 30, 2001

**Screening Group Name :** NORTH CAROLINA



# Ready to Post: Posting the Raw Data to Production Batch Job

**AIRS-AQS**

Action Help Session Admin Retrieval Maintenance Poc Critical Rev Certification Batch COrrect

Batch Process (Instructor1)

Batch Load | Batch Reports

Default Unix Dir: /data/aqs/aqstrain/trf  
Canyon User ID: trf Priority: HIGH Run Time: NOW

**Files from CDX ready to Load:**

File Date	File Name	Status
20030305:14:16	badt51.txt	NOTIFY
20030305:14:16	sitemt50.txt	NOTIFY
20030305:14:16	sitemt51.txt	NOTIFY

Refresh CDX


Session Date	Oracle User Id	Session Status	Job Type	File Name
20030305 14:20	TRF	ACTIVE	FILE	badt51.txt
20030226 10:13	TRF	ERROR	ST_TABLES	
20021112 18:15	TRF	ERROR	FILE	samplepaac.txt

Refresh Cancel Ses..

CDX Load File Submit Correct D... Stats CR Post

Date of File uploaded through CDX

Record: 1/? <OSC>



# Ready to Post!

**Review Statistical Data (North Carolina)**

Raw Overview | Critical Review Raw Data | Statistical Errors | Raw Data

Monitor ID: 37-057-5555-81102-3 | Year - Quarter: 2001-2 | CR Exists: N | Stats Exist: N | Monitor Locked: N | Date Locked: | Release Lock

**AIRS-AQS**

Action Help Session Admin Retrieval Maintenance Poc Critical Rev Certification Batch Correct

Review Statistical Data (Instructor1)

Raw Overview | Critical Review Raw Data | Statistical Errors | Raw Data

Canyon User ID: TRF | Priority: HIGH | Run Time: NOW

**Raw Data**

Monitor ID: | List Qualifier Details

Mp ID	Std Samp Value	Unit	Samp Begin Date	Rptd Samp Value	Action Ind	Qualifier Details?

**Monitor Protocols**

Mp Id	Parameter Code	Method Code	Unit	Duration Code	Coll Freq Code	Alt Mdl

Return to Batch Process... | Post Data to Production

Enter the user id for remote processing.

Record: 1/1 | <OSC>

# Run the Raw Data Inventory Report

**AIRS-AQS**

Action Help Session Admin Retrieval Maintenance Poc Critical Rev Certification Batch Correct Window

**Batch Process (North Carolina)**

Batch Load **Batch Reports**

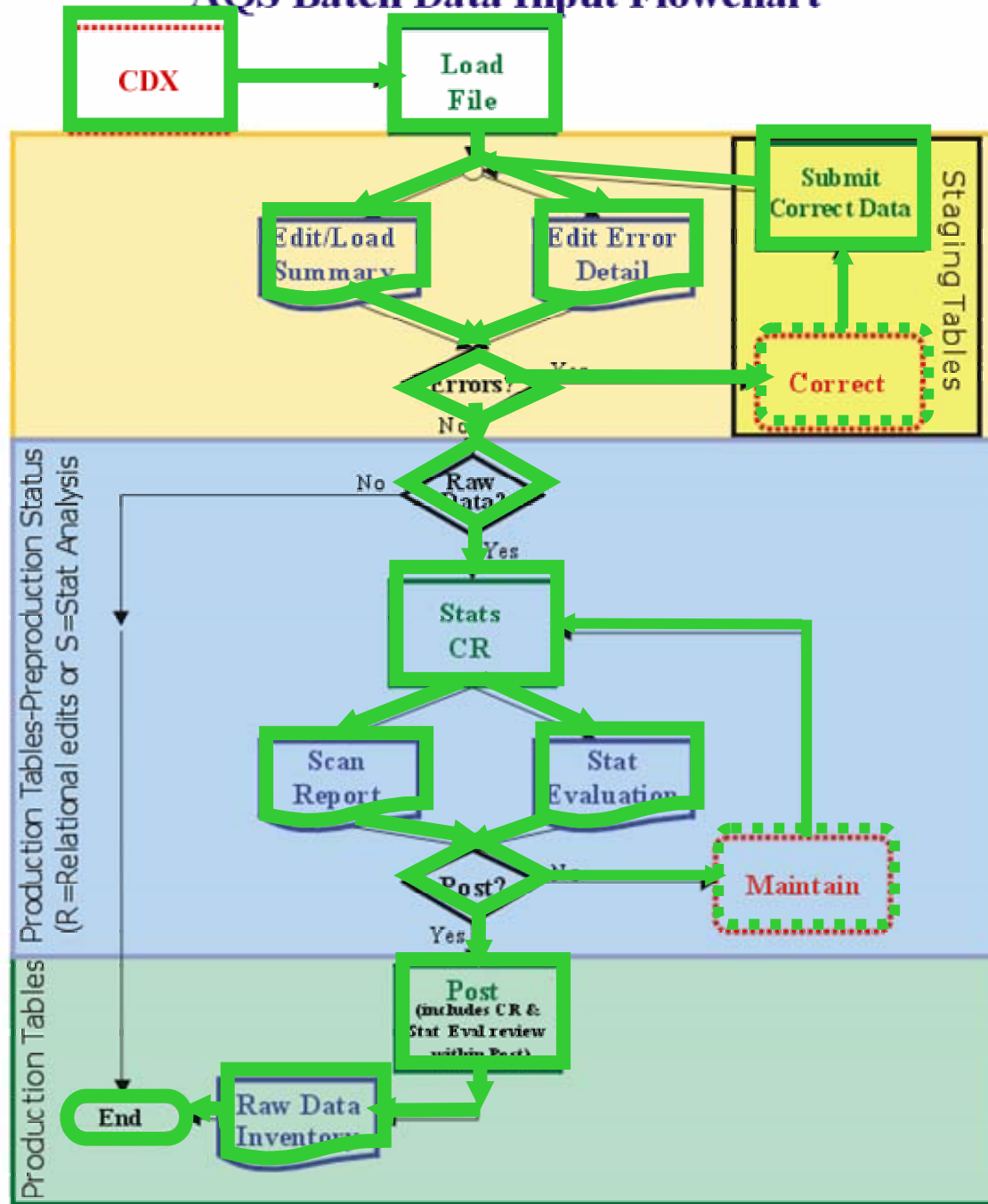
**Batch Reports**

Screening Group Name: NORTH CAROLINA Refresh

Session Date	Oracle User Id	File Name	Job Type
20010520 20:24	BOS		POST
20010520 20:22	BOS		CRST
20010520 18:20	BOS		POST
20010520 17:38	BOS		CRST
20010520 14:47	BOS		ST_TABLES
20010520 14:05	BOS		ST_TABLES
20010520 14:03	BOS		ST_TABLES
20010508 15:15	BOS		POST
20010508 14:58	BOS		CRST
20010502 14:14	BOS		ST_TABLES

Edit/Load Summary Edit Error Details Scan Report Stat Evaluation **Raw Data Inventory**

# AQS Batch Data Input Flowchart



Path taken with  
“dirty” raw data

## Legend



# Adding Batch Raw Data is as easy as . . .

1

FTP

2

Load

3

Review Load Results

4

Stats CR

5

Post

# Batch Loading Raw Data (Bad or Dirty) Exercise

- Please turn to Student Exercise 3
- Use your assigned student username (t##), and password aqsis4me2, database is aqstrng
- Where ## is your assigned student number
- Use your corresponding badt##.txt file in c:\aqs\_train\testdata\bad

(“##” is your assigned student number)

# Maintaining the Data

Browse, Update, and Posting Updated Data

# In This Module

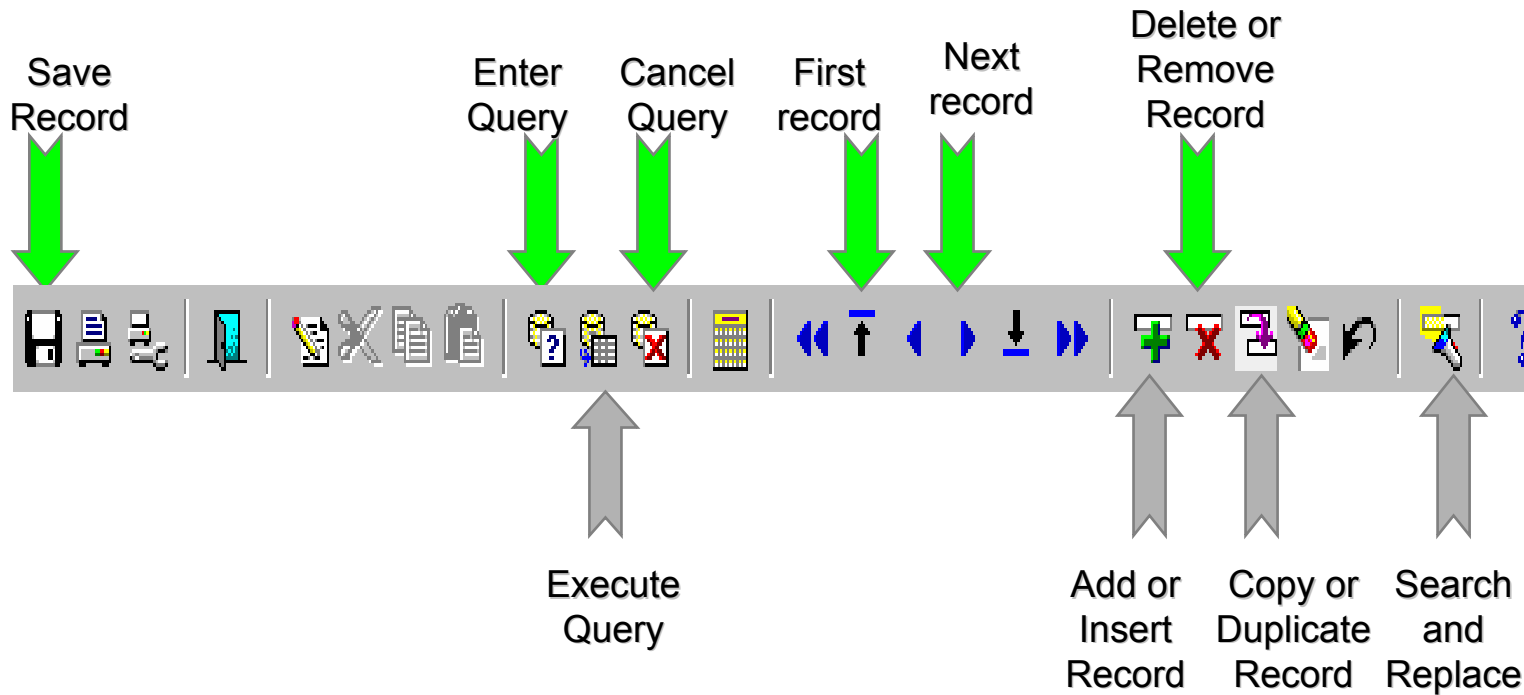
- We will examine how to use the Maintenance screens for using online Browsing and Updating for Site and Monitor information. Other transactions use similar processes with different screen formats.



# Overview

- Browsing the Data
- Updating the Data
- Posting the Updated Data

# The AQS “Tool Bar”



# Browsing the AQS Data

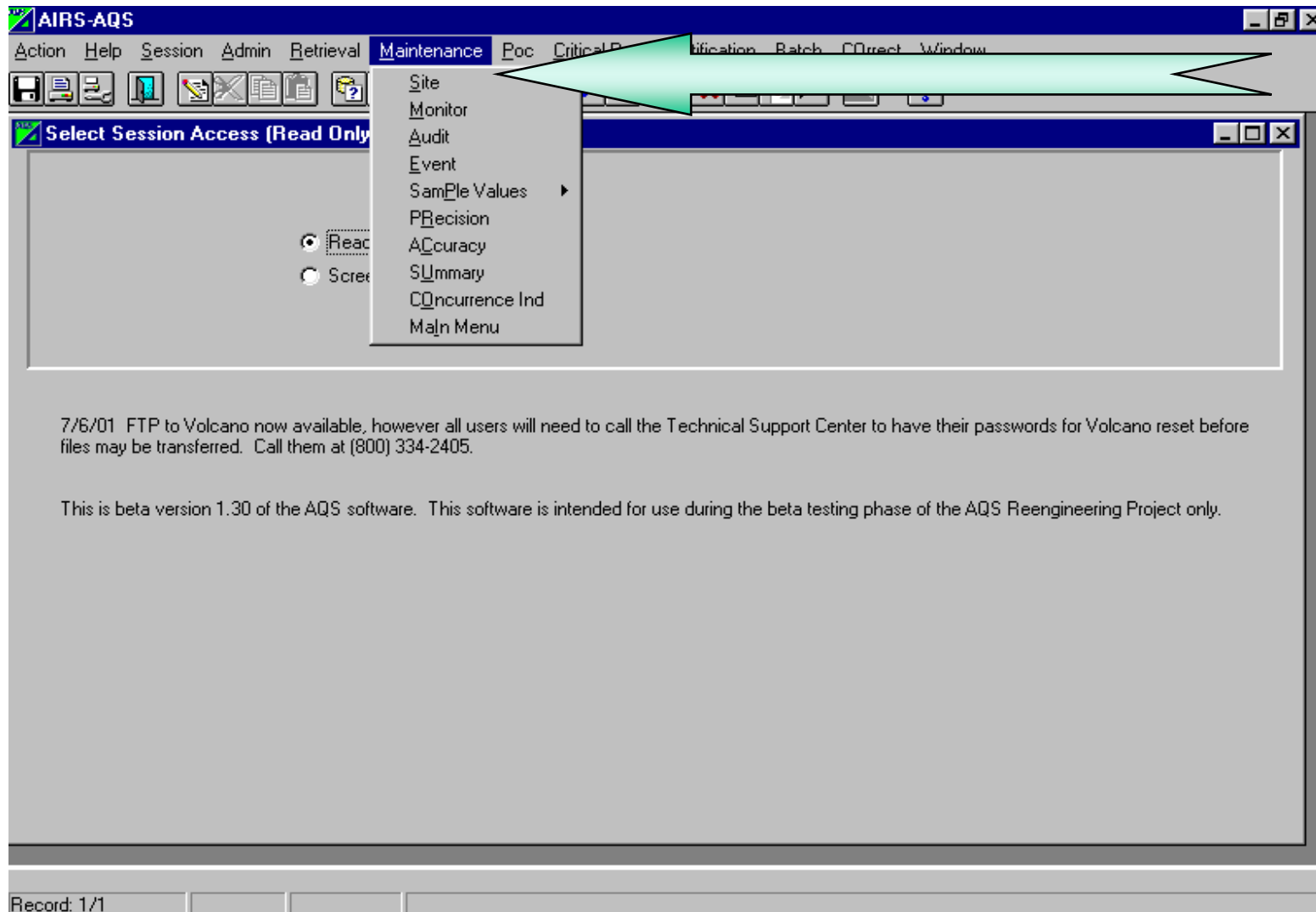
- Browse from the Maintenance option
  - Read only access
  - Selection global or by record
  - Displays data as stored
    - Codes (01 ) vs. descriptors ( Alabama )

# Steps for Browsing the AQS Data

- Step 1: Choose the “Maintenance” button, then the choose the type of data you would like to browse (Site, Monitor, Audit, Event, etc) option.
- Step 2: NO NEED to Click “Enter Query” button before you enter any data. (New version in Enter Query)
- Step 3: After choosing the State Code, County Code and if known other data, click on the “Execute Query” button.
- Step 4: Browse the data.

**Note:** If you chose to leave this screen before you “Execute” the Query , you must choose the “Cancel Query” button.

# Step 1. Choose the Maintenance Option



**Site  
Data**

# Step 2. New AQSWEB User is in Query Mode

**AIRS-AQS**

Action Help Site Monitor Audit Event Sample Values Precision Accuracy Summary Concurrence Ind Main Menu Window

Maintain - Site Data (Read Only)

Basic Site Data Agency Roles Tangent Roads Open Paths Comments

State Code  County Code  Site Id

Required Optional

Site Latitude	<input type="text"/>	Site Longitude	<input type="text"/>	Utm Zone Num	<input type="text"/>
Utm Easting	<input type="text"/>	Utm Northing	<input type="text"/>		
<b>LDP Coll Method</b>	<input type="text"/>	<b>LDP Horiz Datum</b>	<input type="text"/>		
<b>LDP Src Scale</b>	<input type="text"/>	<b>LDP Accr Value</b>	<input type="text"/>		
<b>LDP Vert Meas</b>	<input type="text"/>	<b>Street Address</b>	<input type="text"/>		
<b>City Code</b>	<input type="text"/>	<b>UAR Code</b>	<input type="text"/>	<b>AQCR Code</b>	<input type="text"/>
<b>Land Use Type</b>	<input type="text"/>			<b>Loc Setting</b>	<input type="text"/>
<b>Site Estab Date</b>	<input type="text"/>				

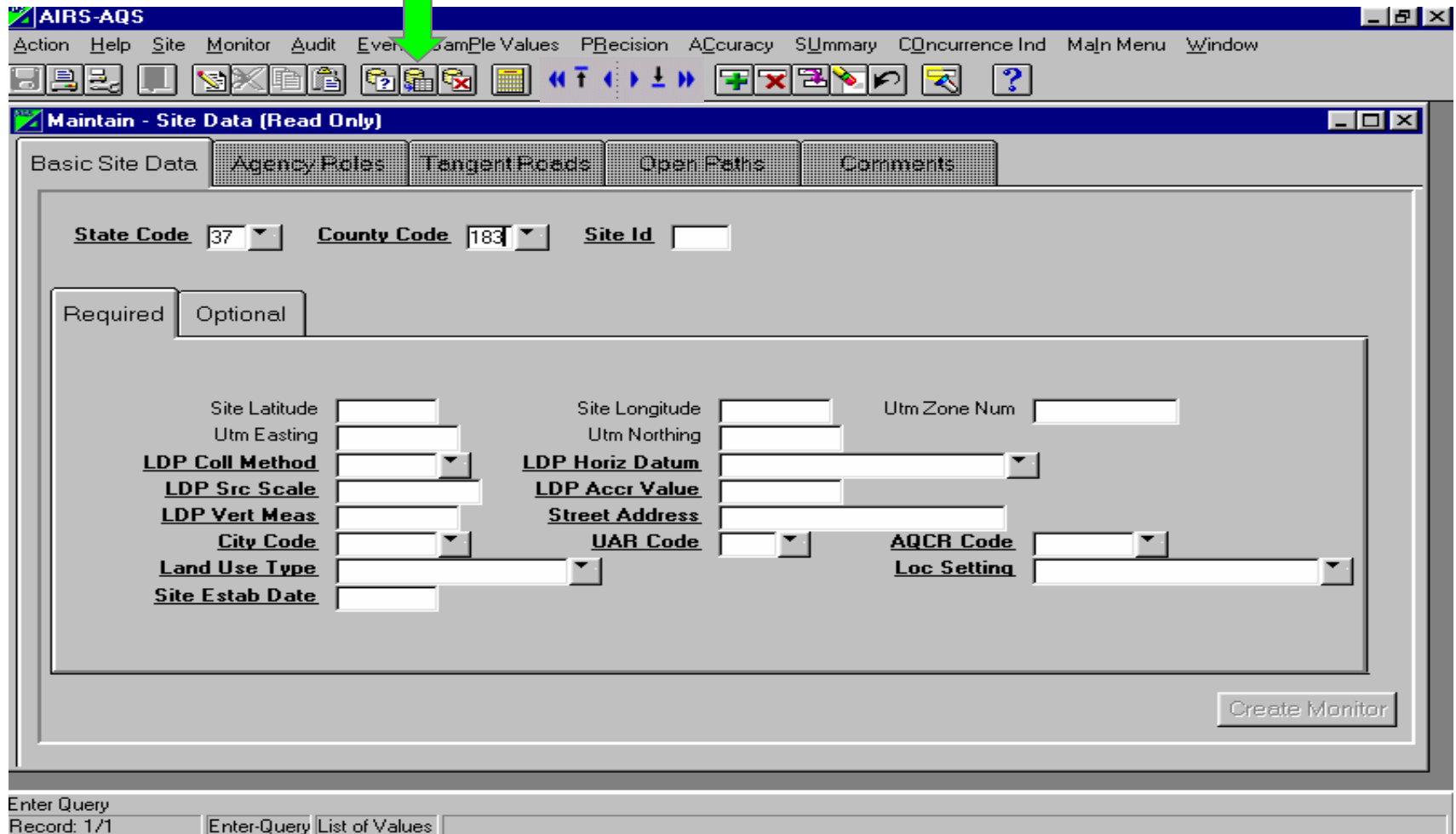
Create Monitor

Enter the UTM Easting value.

Record: 1/1

# Step 3. Enter State, County and other data and Click on “Execute Query”

Execute Query



The screenshot displays the AIRS-AQS software interface. The main window is titled "Maintain - Site Data (Read Only)". It features a menu bar with options: Action, Help, Site, Monitor, Audit, Events, Sample Values, Precision, Accuracy, Summary, Concurrence Ind, Main Menu, and Window. Below the menu bar is a toolbar with various icons, including a green arrow pointing to the "Execute Query" button. The main content area is divided into tabs: Basic Site Data, Agency Roles, Tangent Roads, Open Paths, and Comments. The "Basic Site Data" tab is active, showing fields for State Code (37), County Code (183), and Site Id. Below these are tabs for Required and Optional data entry. The Required data entry section contains fields for Site Latitude, Site Longitude, Utm Zone Num, Utm Easting, Utm Northing, LDP Coll Method, LDP Horiz Datum, LDP Src Scale, LDP Accr Value, LDP Vert Meas, Street Address, City Code, UAR Code, AQCR Code, Land Use Type, Loc Setting, and Site Estab Date. A "Create Monitor" button is located at the bottom right of the form. The status bar at the bottom shows "Enter Query" and "Record: 1/1".

**AIRS-AQS**

Action Help Site Monitor Audit Events Sample Values Precision Accuracy Summary Concurrence Ind Main Menu Window

**Maintain - Site Data (Read Only)**

Basic Site Data Agency Roles Tangent Roads Open Paths Comments

State Code 37 County Code 183 Site Id

Required Optional

Site Latitude Site Longitude Utm Zone Num  
Utm Easting Utm Northing  
LDP Coll Method LDP Horiz Datum  
LDP Src Scale LDP Accr Value  
LDP Vert Meas Street Address  
City Code UAR Code AQCR Code  
Land Use Type Loc Setting  
Site Estab Date

Create Monitor

Enter Query  
Record: 1/1 Enter-Query List of Values

# Step 4. Browse the Data!

**AIRS-AQS**

Action Help Site Monitor Audit Event Sample Values **Navigation** Accuracy Summary Concurrence Ind Main Menu Window

**Maintain - Site Data (Read Only)**

Basic Site Data Agency Roles Tangent Roads Open Paths Comments

State Code 37 County Code 183 Site Id 0003

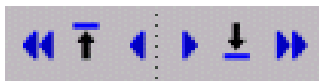
Required Optional

Site Latitude 35.841111 Site Longitude -78.643056 Utm Zone Num 17  
Utm Easting 712875 Utm Northing 3968690  
LDP Coll Method 012 LDP Horiz Datum NAD83  
LDP Src Scale 24000 LDP Accr Value 3.04  
LDP Vert Meas 125 Street Address FIRE STATION #9 SIX FORKS  
City Code 55000 UAR Code 6639 AQCR Code 166  
Land Use Type COMMERCIAL Loc Setting SUBURBAN  
Site Estab Date 19720101

Create Monitor

Enter a State FIPS code that identifies one of the 50 states or other countries.  
Record: 3/? List of Values

Remember how to get the next record? First/last record? Next/previous block?





# Step 4. Browse the Data: Optional Site Data, Agency Roles, Tangent Roads, Open Paths

**AIRS-AQS**

Action Help Site Monitor Audit Event Sample Values Precision Accuracy Summary Concurrence Ind Main Menu Window

**Maintain - Site Data (Read Only)**

Basic Site Data Agency Roles Tangent Roads Open Paths Comments

State Code 37 County Code 183 Site Id 0003

Required Optional

Time Zone EASTERN Terminated Date  
Zip Code Congr Distr Num  
Census Tract Block Group Block Num  
Class 1 Area Local Region  
Local Site Name Hq Eval Date 19840626 Reg Eval Date  
Compass Sector NE City Dist Local Site Id  
Met Site Type Met Site Dist Direct Met Site

Met Site Id: State Code County Code Site Id

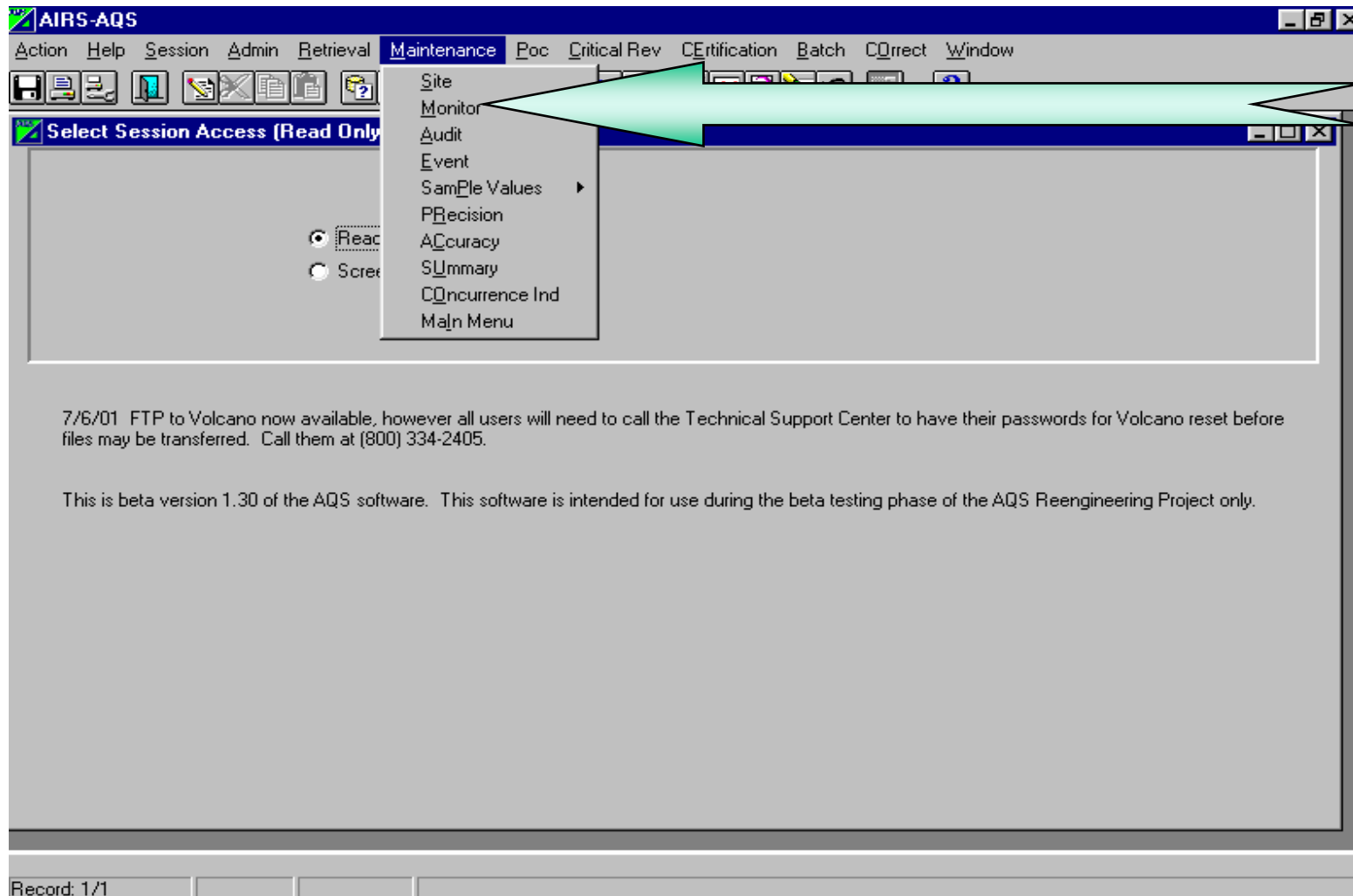
Create Monitor

Other Data Tabs

Optional Data Tab

Enter a State FIPS code that identifies one of the 50 states or other countries.  
Record: 3/? List of Values

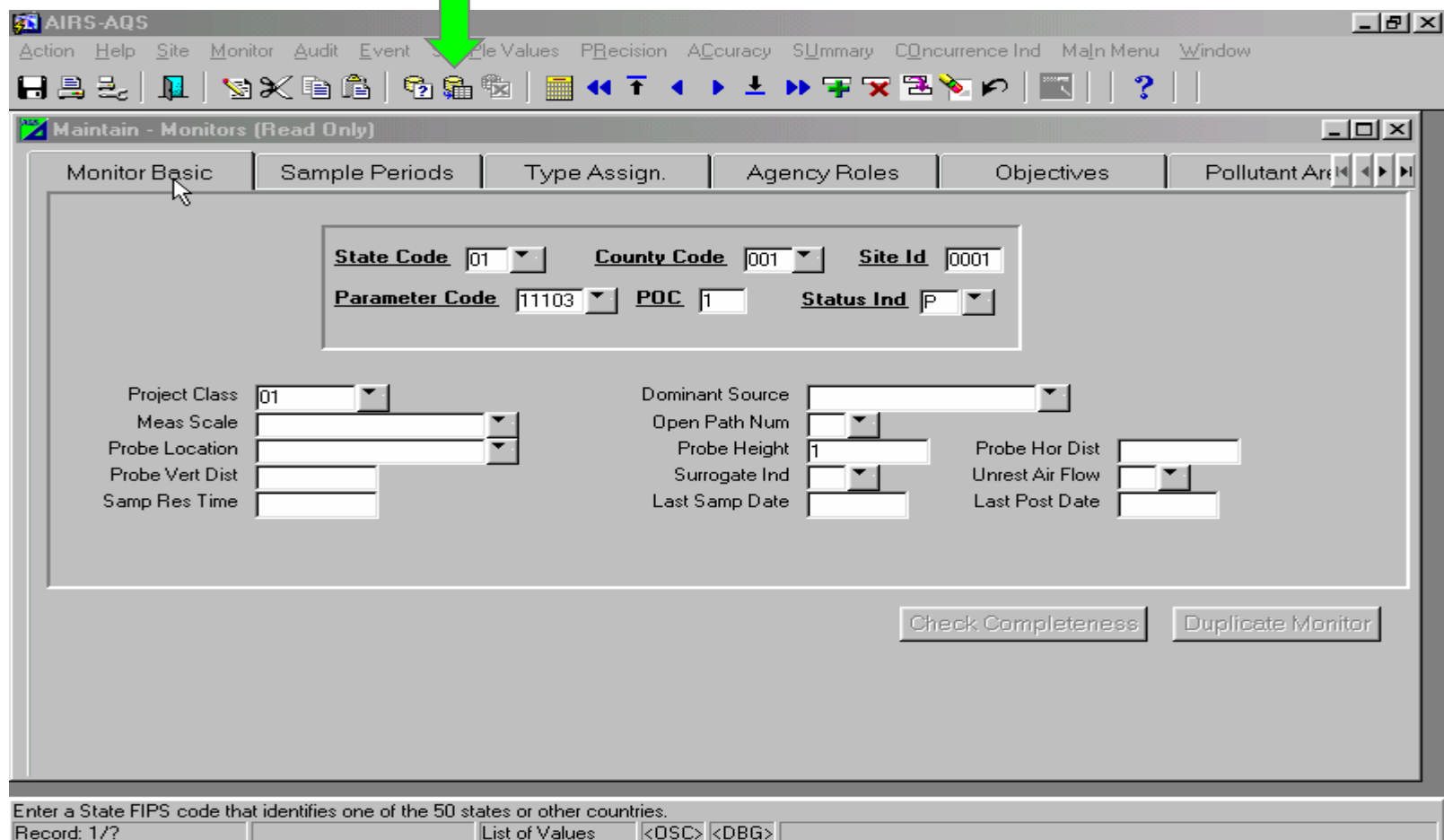
# Step 1. Choose the Maintenance Option



**Monitor  
Data**

# Step 3. Enter data for State, County Code and other Data and click “Execute Query”

Execute Query



The screenshot shows the AIRS-AQS software interface. A green arrow points to the 'Execute Query' button. The interface includes a menu bar (Action, Help, Site, Monitor, Audit, Event, Sample Values, Precision, Accuracy, Summary, Concurrence Ind, Main Menu, Window) and a toolbar. The 'Monitor Basic' tab is selected, showing fields for State Code (01), County Code (001), Site Id (0001), Parameter Code (11103), POC (1), and Status Ind (P). Below these are fields for Project Class (01), Meas Scale, Probe Location, Probe Vert Dist, Samp Res Time, Dominant Source, Open Path Num, Probe Height (1), Surrogate Ind, Last Samp Date, Probe Hor Dist, Unrest Air Flow, and Last Post Date. At the bottom, there are buttons for 'Check Completeness' and 'Duplicate Monitor'. A status bar at the very bottom indicates 'Record: 1/?' and 'List of Values'.

**State Code** 01 **County Code** 001 **Site Id** 0001  
**Parameter Code** 11103 **POC** 1 **Status Ind** P

Project Class 01  
Meas Scale  
Probe Location  
Probe Vert Dist  
Samp Res Time

Dominant Source  
Open Path Num  
Probe Height 1  
Surrogate Ind  
Last Samp Date

Probe Hor Dist  
Unrest Air Flow  
Last Post Date

Check Completeness Duplicate Monitor

Enter a State FIPS code that identifies one of the 50 states or other countries.  
Record: 1/? List of Values <OSC> <DBG>

# Step 4. Browse the Data!

**AIRS-AQS**

Action Help Site Monitor Audit Event Sample Values Precision Accuracy Summary Concurrent Ind Main Menu Window

Maintain - Monitors (Read Only)

Monitor Basic | Sample Periods | Type Assign. | Agency Roles | Objectives | Pollutant Ar

State Code 01 County Code 001 Site Id 0001

Parameter Code 11103 POC 1 Status Ind P

Project Class 01 Meas Scale Dominant Source Open Path Num Probe Height 1 Probe Hor Dist Unrest Air Flow Last Post Date

Probe Location Probe Vert Dist Smp Res Time Surrogate Ind Last Samp Date

Check Completeness Duplicate Monitor

Enter a State FIPS code that identifies one of the 50 states or other countries.

Record: 1/? List of Values <OSC> <DBG>

Page up and down or use arrow keys.

## Step 4. Browse the Data: For Monitors, Sample Periods, Agency Roles, Pollutant Areas and Other Data

[illegible]

# Break and Browsing the AQS Data Exercise

- Please turn to Student Exercise 4
- Use your assigned student username (t##),  
and password aqsis4me2
- Where ## is your assigned student number

# Maintaining the Data: AQS Online Update

- Update with Maintain
  - Update existing records
  - Delete records
  - Add new records
- Screening Group Ownership
  - Data must be “owned” to be changed
  - Selection global or by record
  - Edits/Validations performed
    - Type entry or drop down lists to select
    - Required fields/tabs identified ( bold / underlined )
  - **Save Changes**
    - Checks dependencies between tabs

# Update Existing Records

- Can Update
  - Site Records
  - Monitor records
  - Raw Data records
- Select global (all in county) or individual data – based on ownership.
- Enter new data or change data elements and press “SAVE” to save options.
- Go through the POST process, if raw data is updated.





# Delete Records

- Raw data may be deleted.
  - Remember to run Stats CR job & post the deletes
- Monitors may be deleted.
  - This deletes any related records.
  - All data must be deleted first.
- Sites may be deleted
  - All but one monitor must be deleted first.



# Site/Monitor Add

- Select Maintain Site screen
  - 1. Cancel Query button
  - 2. Add (+) Record button
  - 3. Enter new Site ID
  - 4. Enter site data in fields
  - 5. Click Save record button
  - 6. Click on Create Monitor button
- Maintain Monitor Screen
  - 1. Cancel Query button
  - 2. Add (+) Record Button
  - 1. Select parameter
  - 2. Enter monitor data in fields
  - 3. Click Save record button

# Adding a New Site Step 1. Enter a new Site ID Number

**AIRS-AQS**

Action Help Site Monitor Audit Event Sample Values Precision Accuracy Summary Concurrence Ind Main Menu Window

**Maintain - Site Data (Read Only)**

Basic Site Data Agency Roles Tangent Roads Open Paths Comments

State Code 37 County Code 183 Site Id

Required Optional

**New Site Id Number**

Site Latitude Site Longitude Utm Zone Num  
Utm Easting Utm Northing  
LDP Coll Method LDP Horiz Datum  
LDP Src Scale LDP Accr Value  
LDP Vert Meas Street Address  
City Code UAR Code AQCR Code  
Land Use Type Loc Setting  
Site Estab Date

Create Monitor

Enter Query  
Record: 1/1 Enter-Query List of Values

Don't press enter query first!

# Adding a New Site

## Step 2. Enter Site Data

## Step 3. Save the record

Save record

**AIRS-AQS**

File Edit View Options Help Site Monitor Audit Event Sample Values Precision Accuracy Summary Concurrence Ind Main Menu Window

**Maintain - Site Data (Read Only)**

Basic Site Data Agency Roles Tangent Roads Open Paths Comments

State Code **09** County Code **013** Site Id **0002** Status Ind **P**

Required Optional

Site Latitude **41.8175** Site Longitude **-72.243056** Utm Zone Num **18**

Utm Easting **729000** Utm Northing **4633000**

LDP Coll Method **027** LDP Horiz Datum **UNKNOWN**

LDP Src Scale **0** LDP Accr Value **0**

LDP Vert Meas **174** Street Address **UNIVERSITY OF CONNECTICU**

City Code **45260** UAR Code **0000** AQCR Code **042**

Land Use Type **AGRICULTURAL** Loc Setting **RURAL**

Site Estab Date **19730101**

Create Monitor

Record: 2/? List of Values <OSC> <DBG>

Add Site  
Data as  
required

# Adding a New Site Step 4. Click on Create Monitor button

**AIRS-AQS**

Action Help Site Monitor Audit Event Sample Values Precision Accuracy Summary Concurrence Ind Main Menu Window

Maintain - Site Data (Instructor 2)

Basic Site Data Agency Roles Tangent Roads Open Paths Comments

State Code 09 County Code 013 Site Id 9000 Status Ind F

Required Optional

Site Latitude		Site Longitude		Utm Zone Num	
Utm Easting		Utm Northing			
LDP Coll Method		LDP Horiz Datum			
LDP Src Scale		LDP Accr Value			
LDP Vert Meas		Street Address			
City Code		UAR Code		AQCR Code	
Land Use Type				Loc Setting	
Site Estab Date					

Create Monitor

Enter the LDP Collection Method Code identifying the method used to determine latitude and longitude.  
Record: 1/1 List of Values <OSC> <DBG>

# Adding Monitor Data Step 1. Select parameter

**AIRS-AQS**  
Action Help Site Monitor Audit Ever

**Maintain - Monitors (0 aqps)**

Monitor Basic Sample Per

State

Project Type   
Meas Scale   
Probe Location   
Probe Vert Dist   
Samp Res Time

**Valid values for Parameter Code**

Find

Parameter Code	Parameter Desc
11101	Suspended Particulate (TSP)
11103	BENZENE SOL ORG(TSP)
11104	TOTAL POLYNUCL HYDR
11114	WINDBLOWN PARTICULAT
11115	FUGITIVE DUST
11116	FUGITIVE EMISSIONS
11117	FINE MINERAL FIBERS
11118	OTHER EMISSIONS
11119	PARTICULATE MATTER-SOOT BLOWING
11120	VISIBLE EMISSIONS
11121	CRYSTALLINE QUARTZ
11122	CRISTABALITE
11201	Soil Index (COH)
11202	Soil Index (RUD)
11203	Light Scatter
11204	SMOKE
11205	SOIL INDEX (UG/M3)
11206	LIGHT SCATTER (UG/M3)
11207	LIGHT SCATTER (UG/M3) (SUSPENDED PARTICULATE)

Find OK Cancel

Duplicate Monitor

Choices in list: 1376  
Record: 1/1 List of Values

# Adding Monitor Data

## Step 2. Enter Monitor Data

## Step 3. Click Save record button

Save record

**AIRS-AQS**

File Edit View Options Help Site Monitor Audit Event Sample Values Precision Accuracy Summary Concurrent Ind Main Menu Window

Save Print Copy Paste Undo Redo Cut Paste Find Help

**Maintain - Monitors (Instructor 2)**

Monitor Basic | Sample Periods | Type Assign. | Agency Roles | Objectives | Pollutant Ar

State Code 09 County Code 013 Site Id 9000

Parameter Code 11203 POC 23 Status Ind F

Project Type 50 Meas Scale MICROSCALE

Probe Location Probe Vert Dist Smp Res Time

Dominant Source POINT Open Path Num 9 Probe Height Surrogate Ind Last Samp Date

Probe Hor Dist Unrest Air Flow Last Post Date

Duplicate Monitor

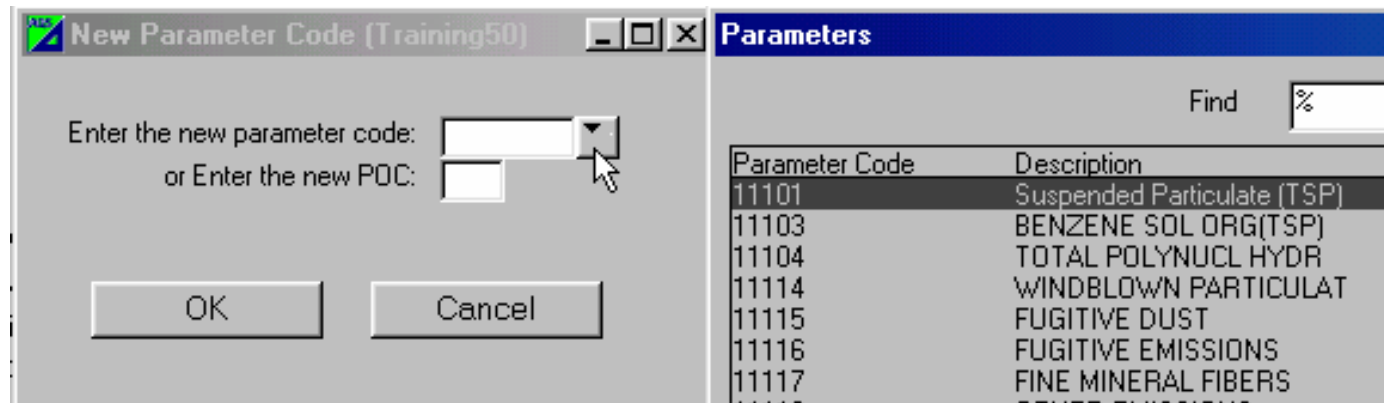
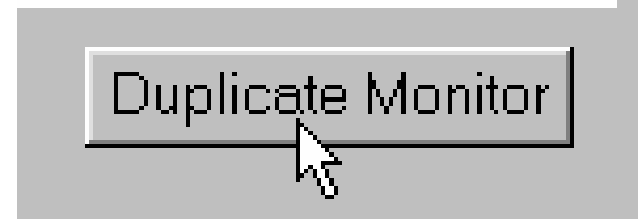
Enter a Parameter Occurrence Code to distinguish between different monitors at one site that are measuring the same parameter.

Record: 1/1 <OSC> <DBG>

Add  
Monitor  
Data as  
required

# Update by Duplicate Monitor

- Duplicate Steps
  - Query to select monitor
  - Click on Duplicate Monitor
  - Enter new parameter and POC codes



- Click on Okay
- Click on “save”
- Respond to error messages
- Final “save”





## Maintaining the AQS Data - Raw Data Inserts, Updates, Deletes

- The primary way to insert, update or delete raw data is thru the data input batch process
- Can do updates and deletes to “pre-production” (Status-ind = R or S) raw data which have been loaded using the data input batch process
- Can add new raw data using Maintain
  - For lead, particulate,.....

## Maintaining the AQS Data - Posting the Updated Data

- If any CHANGES are made to the raw data, these changes must go thru the batch POST process to be checked for errors and posted to the AQS database.
- If updates are made to the site and monitor data, these changes are updated on the database from the maintenance screens. Note: Post is not needed for site/monitor changes.

# Adding a New Site/Monitor Exercise

- Please turn to Student Exercise 5
- Use your assigned student username (t##), and password aqsis4me2, database is aqstrng
- Where ## is your assigned student number

(“##” is your assigned student number)

# The AQS Canned Reports

## AQS Reports

# Introduction

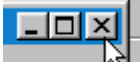
- In this module we will examine how data is retrieved using “Canned” Reports. They are grouped:
  - Standard Reports
  - Browse Reports

The Format of both types of reports have preset contents .
- Ad Hoc reports can be customized to contain information that the user identifies. A introduction to Oracle Discoverer session will follow the end of this session. Also, refer to Appendix C for Oracle Discoverer guidelines and tips.

# Canned Reports

- Standard and Browse reports can provide site, monitor, summary or raw data information.
- Data retrieved is not limited to your screening group!
- Reports contents can be altered by providing different criteria information. Criteria information is specifications used to generate the report:
  - geographical,
  - pollutant, and / or
  - date range.
- You may recognize many of these standard reports as the 'AMPXXX' reports.
- Provide as detailed a criteria as possible to help reduce system overhead!

# Requirements

- The Oracle report engine will not start another report if another report is open. Check the bottom of your screen for icons that indicates a previewer is already running and close  old reports to start a new one.



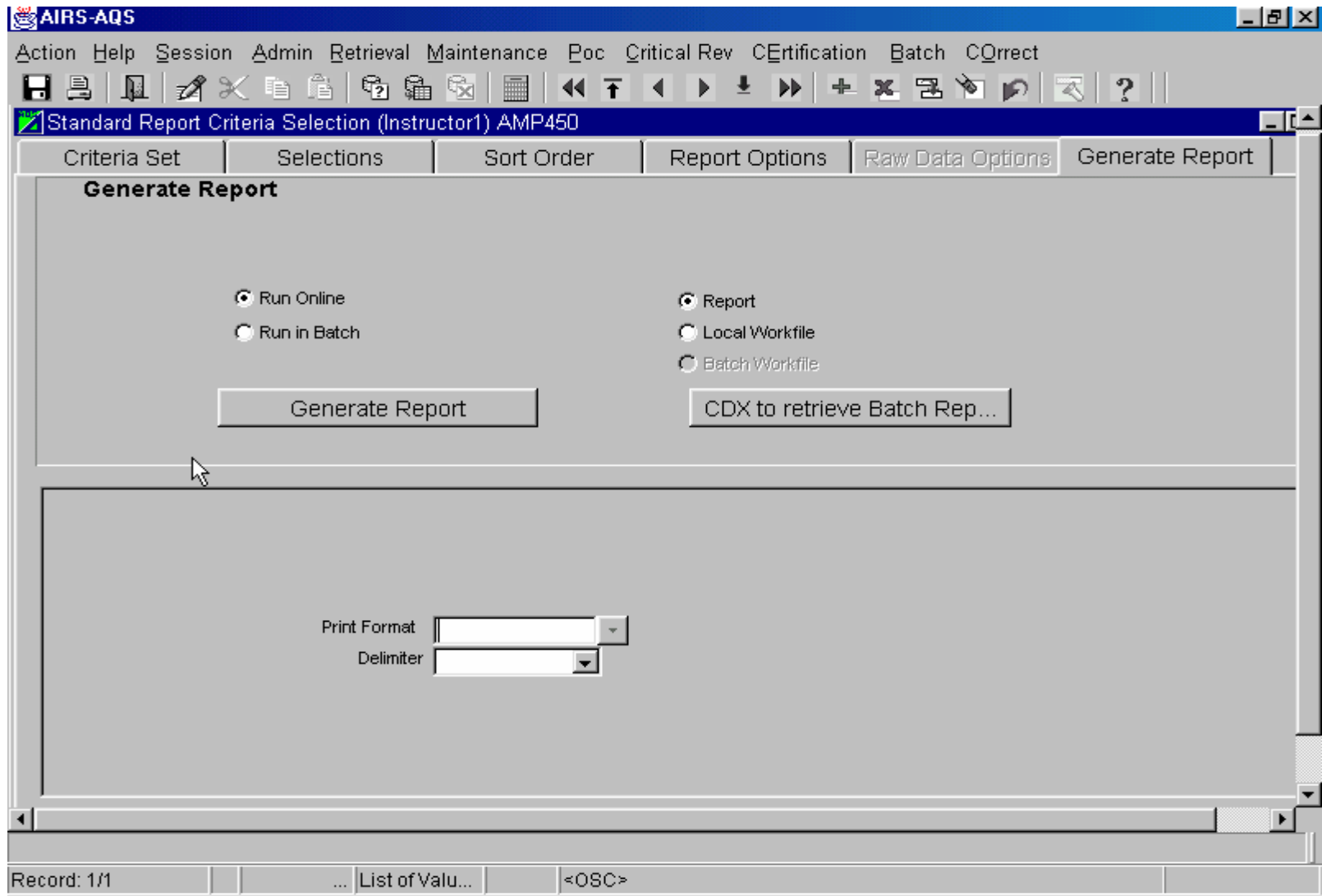
- The next slide gives data that is required to run the different types of standard reports. It can be used for future reference.
- Note that most reports require from and to dates. The training database is 1998 data.

Report Name	Date	Parameter	Geographic
Accuracy	R	R1	R1
Daily Summary	R	R2	R2
Precision	R	R1	R1
Air Quality Index	R	R1	R1
Data Completeness	R	R1	R1
Frequency Distribution	R	R1	R1
Max Values	R	R	
Monitor Description		R2	R2
Monitor Network		R2	R2
P/A Monitor Raw Data	R	R1	R1
P/A Reporting Organization	R		R
Quick Look	R	R1	R1
Raw Data	R	R2	R2
Reduced Frequency	R	R1	R1
Site Monitor		R	R
Violation Day Count	R	R	

R = Required; R1= Parameter OR Geographic in addition to date, R2=Geographic OR Parameter



# Report Generate Screen – Online



The screenshot shows a software window titled "AIRS-AQS" with a menu bar (Action, Help, Session, Admin, Retrieval, Maintenance, Poc, Critical Rev, Certification, Batch, COrrect) and a toolbar. The main area is titled "Standard Report Criteria Selection (Instructor1) AMP450" and contains a tabbed interface with "Criteria Set", "Selections", "Sort Order", "Report Options", "Raw Data Options", and "Generate Report". The "Generate Report" tab is active, showing radio buttons for "Run Online" (selected) and "Run in Batch", and another set for "Report" (selected), "Local Workfile", and "Batch Workfile". Below these are buttons for "Generate Report" and "CDX to retrieve Batch Rep...". At the bottom, there are dropdown menus for "Print Format" and "Delimiter". The status bar at the very bottom shows "Record: 1/1", "... List of Valu...", and "<OSC>".

**AIRS-AQS**

Action Help Session Admin Retrieval Maintenance Poc Critical Rev Certification Batch COrrect

Standard Report Criteria Selection (Instructor1) AMP450

Criteria Set Selections Sort Order Report Options Raw Data Options Generate Report

**Generate Report**

☒ Run Online  
☐ Run in Batch

☒ Report  
☐ Local Workfile  
☐ Batch Workfile

Generate Report CDX to retrieve Batch Rep...

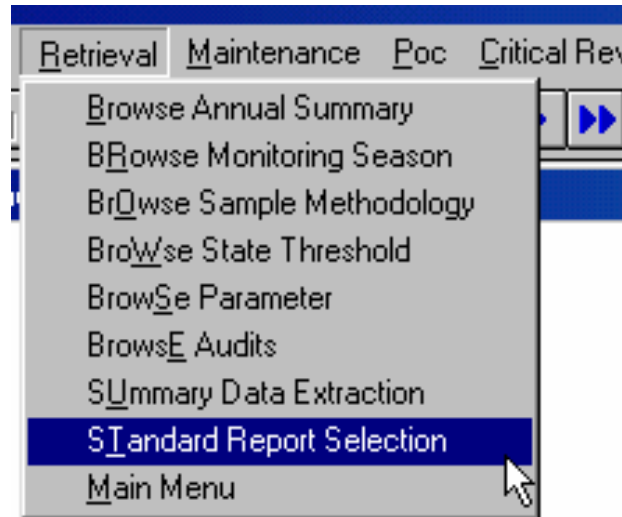
Print Format  
Delimiter

Record: 1/1 ... List of Valu... <OSC>

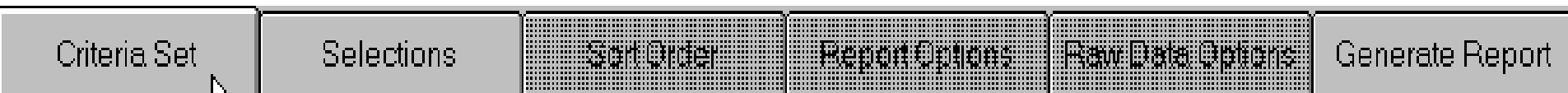
# Instructor Lead Exercise

## Getting started

- Step 1 Log into AQS and choose your Screening group.
- Step 2 Click on 'Retrieval' and then 'Standard Report Selection Criteria' from the drop down menu.



- Step 3 The “criteria set” is the first report tab. Note that several tabs are not active or “on”, these will become active when you choose a report.



# Instructor Lead Exercise

## Criteria & Selections Tabs

- Step 4. Click on the Report Code pull down list. Choose the AMP450.

<b>Report Code</b>	<input type="text"/>	AMP246	PRECISION REPORT
		AMP450	QUICKLOOK CRITERIA PARAMETERS
		AMP450NC	QUICKLOOK NON-CRITERIA PARAMETERS
		AMP350D	RAW DATA DAILY

- Generating a report is a matter of providing the necessary information on the Criteria Set, Selections, Sort Order, Report Options, Raw Data Option and Generate Report tabs. Working left to right on tabs is recommended.

Criteria Set	Selections	Sort Order	Report Options	Raw Data Options	Generate Report
--------------	------------	------------	----------------	------------------	-----------------

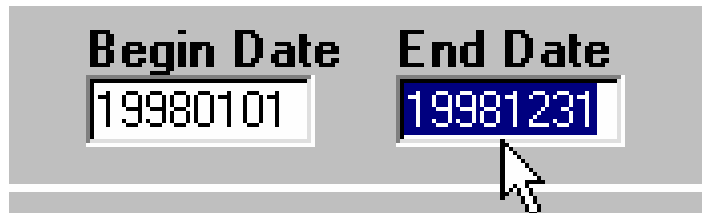
- Step 5 Go to the Selections tab and enter your region, state, pick a county and site.

Criteria Set		Selections		Sort Order	
<b>Selections</b>					
Epa Region Code	State Code	County Code	Site ID	City Code	UAR Code
<input type="text" value="05"/>	<input type="text" value="39"/>	<input type="text" value="017"/>	<input type="text" value="0009"/>	<input type="text"/>	<input type="text"/>

# Instructor Lead Exercise

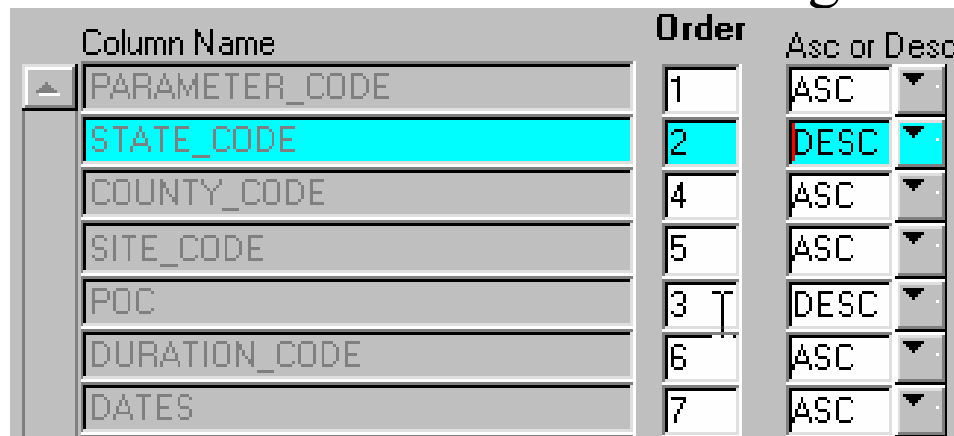
## Criteria & Selections Tabs

Step 6 Put in a date range at the bottom of the screen.



A screenshot of a software interface showing two input fields for dates. The first field is labeled 'Begin Date' and contains the text '19980101'. The second field is labeled 'End Date' and contains the text '19981231'. A mouse cursor is pointing at the 'End Date' field.

Step 7 Go to the Sort Order Tab. Change the order as shown:



A screenshot of a 'Sort Order' tab in a software application. It displays a table with three columns: 'Column Name', 'Order', and 'Asc or Desc'. The table lists several columns, with 'STATE\_CODE' highlighted in red. The 'Order' column shows a sequence of numbers (1, 2, 4, 5, 3, 6, 7) and the 'Asc or Desc' column shows 'ASC' or 'DESC' for each row.

Column Name	Order	Asc or Desc
PARAMETER_CODE	1	ASC
STATE_CODE	2	DESC
COUNTY_CODE	4	ASC
SITE_CODE	5	ASC
POC	3	DESC
DURATION_CODE	6	ASC
DATES	7	ASC

Step 8. Go to the report options and exclude exceptional events.



A screenshot of a report options bar. It features a checkbox labeled 'EXCLUDE EXCEPTIONAL EVENTS' which is checked. To the right of the checkbox is a small icon of a document with a checkmark.

# Instructor Lead Exercise

## Report Generate Screen – Online

**AIRS-AQS**

Action Help Session Admin Retrieval Maintenance Poc Critical Rev Certification Batch COrrect

Standard Report Criteria Selection (Instructor1) AMP450

Criteria Set Selections Sort Order Report Options Raw Data Options Generate Report

**Generate Report**

☒ Run Online  
☐ Run in Batch

☒ Report  
☐ Local Workfile  
☐ Batch Workfile

Generate Report CDX to retrieve Batch Rep...

Print Format  
Delimiter

Record: 1/1 ... List of Valu... <OSC>

# Instructor Lead Exercise

## Report Generate Screen – Online

**AIRS-AQS**

Action Help Session Admin Retrieval Maintenance Poc Critical Rev Certification Batch COrrect

Standard Report Criteria Selection (Instructor1)

Criteria Set Selections Sort Order Report Options Raw Data Options Generate Report

**Generate Report**

☐ Run Online  
☒ Run in Batch

☒ Report  
☐ Local Workfile  
☐ Batch Workfile

Generate Report CDX to retrieve Batch Rep...

Output Directory /data/aqscntr2/testset  
Output File Name  
Print Format PDF  
Delimiter

☐ Send to CDX  
☒ E-Mail Report

The remote destination directory for the output file.

Record: 1/1 ... <OSC>

# Instructor Lead Exercise

## Criteria & Selections Tabs

Step 9      Go to the Generate Report tab and click on Run in Batch.



Notice the information that appears.

Batch reports are done as time is available and delivered via email or put into a file or printed. To get one, fill in the information needed, and press Generate Report.



Step 10      Change the type of report to Run Online  
                If no data is found, loosen your criteria.  
                Perhaps remove the site id.

# Instructor Lead Exercise

## Criteria & Selections Tabs

**AIRS-AQS**

Action Help Session Admin Retrieval Maintenance Poc Critical Rev Certification Batch COrrect

Standard Report Criteria Selection (Instructor1) AMP450

Criteria Set | Selections | Sort Order | Report Options | **Raw Data Options** | Generate Report

**Generate Report**

☒ Run Online  
☐ Run in Batch

☒ Report  
☐ Local Workfile  
☐ Batch Workfile

Generate Report CDX to retrieve Batch Rep...

Print Format   
Delimiter

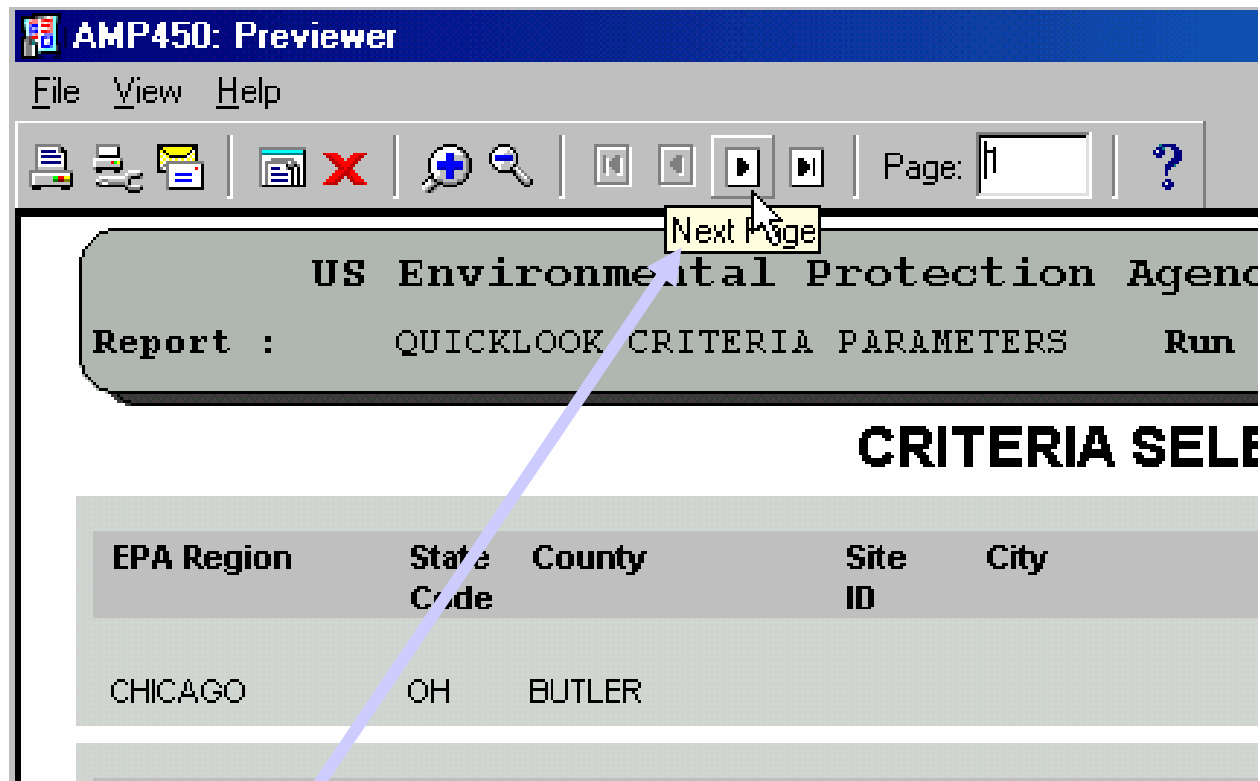
Record: 1/1 ... List of Valu... <OSC>



# Instructor Lead Exercise

## Criteria & Selections Tabs

Step 11 A Report Previewer appears.

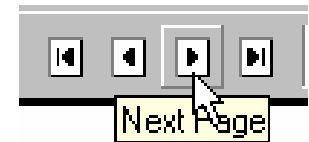


Click on Next Page

# Instructor Lead Exercise

## Criteria & Selections Tabs

You can page up and down through your report.

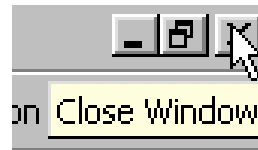


Parameter: OZONE (8-Hour)

All Values are in Units of Parts Per Million

Site ID	P O C	Org Type	City	County	Address	Year
39-017-1004	3	F	MIDDLETOWN	BUTLER	HOOK FIELD MUNICIPAL AIRPORT	1998
39-017-0004	1	F	HAMILTON	BUTLER	SCHULER AND BENDER AVE	1998

Step 12. Close the report  
criteria set tab.



and go back to the

# Instructor Lead Exercise

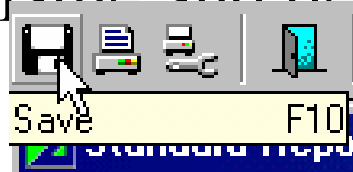
## Criteria & Selections Tabs

- Step 13 Your criteria set that you used can be saved for reuse.

<u>Criteria Set</u>	450 5 39	<u>Desc</u>	first half of 1998
<u>Last Used</u>	20011005 13:56		

enter a criteria set name and description that you will recognize.

Press save.



Criteria set 450 5 39. After pressing save, press clear



# Instructor Lead Exercise

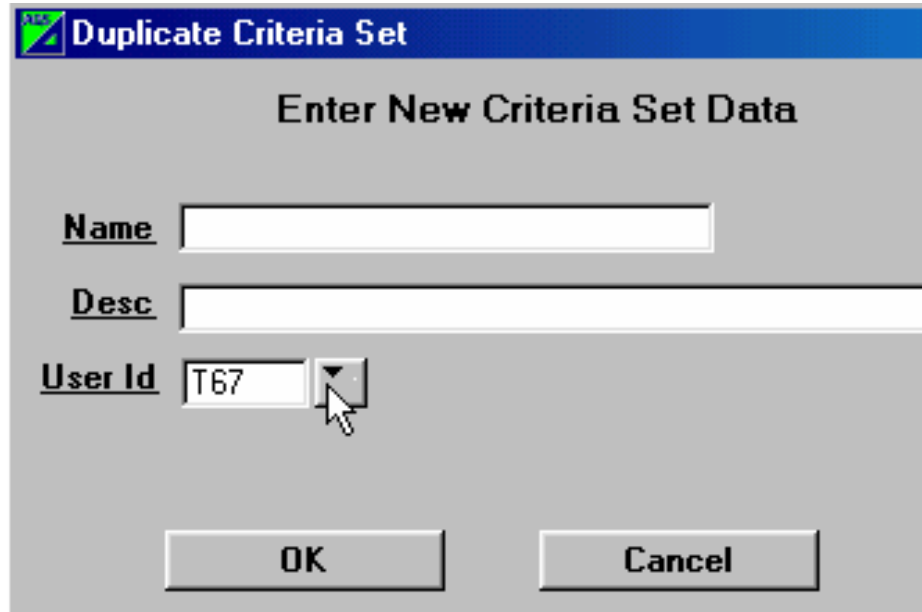
## Sort Order Tab

- Note: Criteria sets can be retrieved by entering a query and selecting the pull down next to criteria set.

Criteria sets can be given to other people.

A rectangular button with a light gray background and a black border. The text "Duplicate Criteria Set" is centered in a black, sans-serif font. A mouse cursor is pointing at the bottom right corner of the button.

You can give the set a new name, description, and choose the user to give it to.

A dialog box titled "Duplicate Criteria Set" with a blue header bar. Below the header is a gray area with the text "Enter New Criteria Set Data". There are three input fields: "Name" (a text box), "Desc" (a text box), and "User Id" (a dropdown menu showing "T67"). At the bottom are "OK" and "Cancel" buttons. A mouse cursor is pointing at the dropdown arrow of the "User Id" field.

**Duplicate Criteria Set**

Enter New Criteria Set Data

Name

Desc

User Id  ▼

OK Cancel

# Using the Canned AQS Reports

## Exercise

- Please turn to Student Exercise 6
- Use your assigned student username (t##), and password aqsis4me2, database is aqstring
- Where ## is your assigned student number

(“##” is your assigned student number)